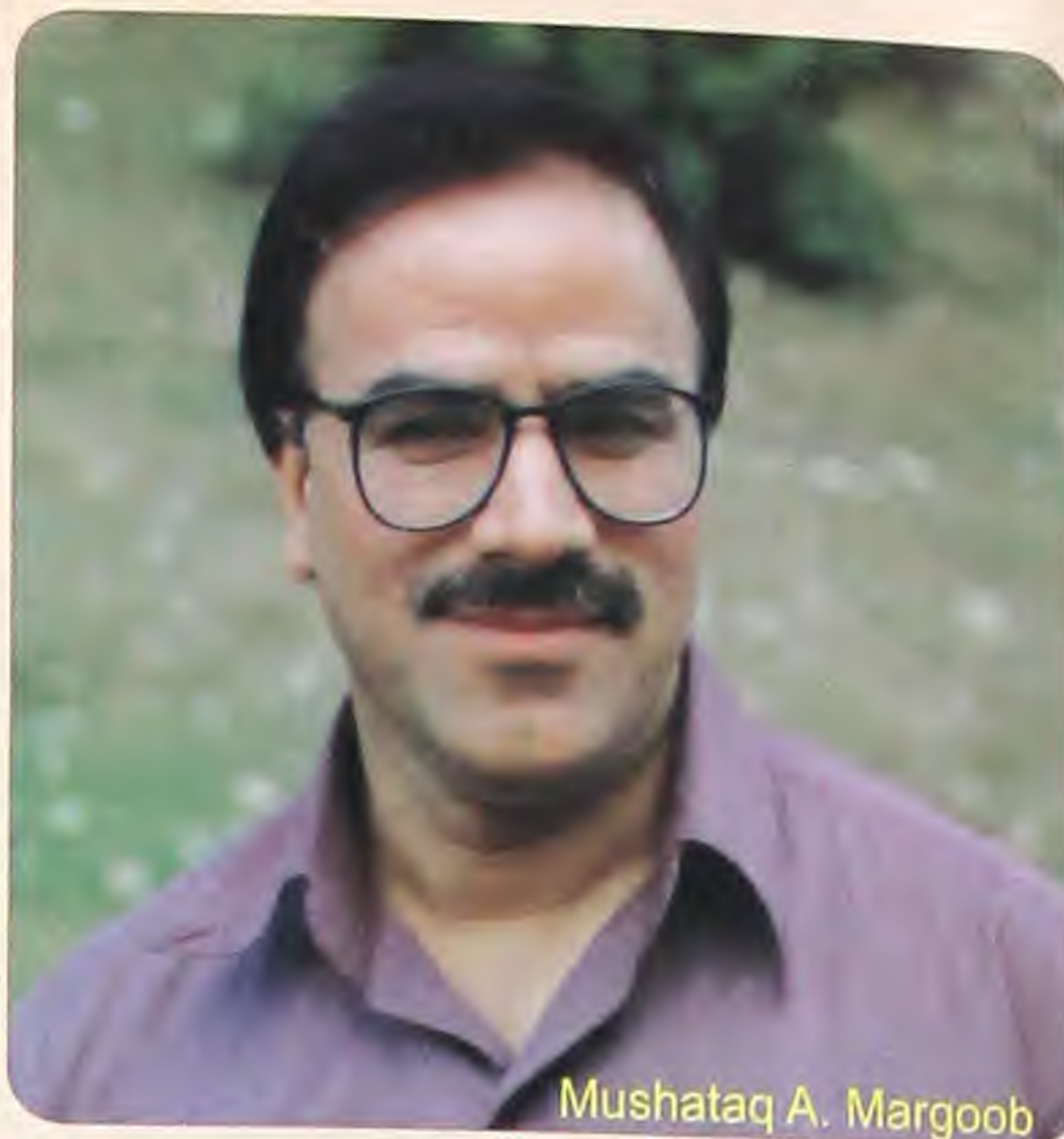


Guest Editors

An internationally recognized expert on disaster psychiatry, Dr. Mushtaq A. Margoob's research work encompasses a wide range of topics relevant to current scenario, from seasonal mood disorders to drug use problems and societal stress coping mechanisms. Dr. Margoob topped the list of first batch of entrants and was the only candidate among the group to receive MD in Psychiatry in 1st attempt, from the University of Kashmir in 1985. He is presently working as an Associate Professor in the Department of Psychiatry, Government Medical College Srinagar Kashmir. In spite of his overwhelmingly busy schedule with clinical service, teaching, psycho education and community consultation activities, Dr. Margoob has never let the paucity of time, primitive hospital setting or grossly inadequate infrastructure to deter his research pursuits. Over the past more than 15 years, the focus of his work has been traumatic stress resulting from man made and natural disasters in the developing world, and its impact on the individuals as well as the communities as a whole.

Dr. Margoob has been actively involved at the national level in the efforts to advance medical



Mushataq A. Margoob

education, research and service planning in mental health. He is currently on the editorial board of the *Indian Journal of Psychiatry*, and has been on the International advisory board of the *JK Practitioner*, from its inception more than 15 yrs back. He is also the founding executive member of Indian Association of Biological Psychiatry. Dr. Margoob, for a long time now has maintained an international presence. The World Psychiatric Association has recently availed his expertise as the coordinator of Task Force on Kashmir earthquake.



Huda Mushtaq

Huda Mushtaq has been keenly interested in studying human behavior and rendering services to the emotionally disturbed masses. She obtained a record percentage in her graduation and 1st rank in her post graduation in Psychology, in 2003 and 2005 respectively, from the University of Kashmir. She stood second in the National competition for M.Phil in clinical Psychology, at the Institute of Human Behavior and Allied Science, New Delhi, and is currently pursuing her studies there. She has been closely associated with, and assisting her father Dr Mushtaq A.Margoob in his research work and aims at carrying on with the mission with same flair as her father.

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From the Executive Editor:

This is the first Supplement to JK-Practitioner. The issue covers the various aspects of traumatic stress, based on the work carried out by Dr. Mushtaq A Margoob (Guest Editor for this issue) and his colleagues for the last, almost two decades. A population living under persistent stress may have been a perfect laboratory for Dr. Mushtaq and his team to explore- but it is to his credit that his systematic analysis of the impact of adverse conditions on human well being has led to some fascinating details and observations to help us understand some of the mysteries of post traumatic stress disorder (PTSD). His work has been highly appreciated round the globe (See Appendix and Inside back page). This supplement should be of immense help to all the Health Care Professionals and Organizations concerned with the Mental Health of an individual. It should prove a valuable tool for all the scientists who want to make inroads into PTSD, to understand its complexities. This is perhaps the first major research work from South Asia on traumatic stress

Zaffar A Khatib

JK-PRACTITIONER Volume 13, Supplement 1

AIMS AND SCOPE:-

JK-Practitioner is a multidisciplinary Medical Journal published quarterly from Srinagar. Emphasis is placed on matters related to medicine in the country in particular, while articles from anywhere in the world are given due importance. Besides original articles and case reports the journal includes clinical reviews, guest articles and special articles on current topics in medicine and therapeutics. Supplement issues are THEME issues and have no regulatory

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Supplement Editors:- Mushtaq A Margoob, Huda Mushtaq

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TRAUMATIC STRESS: Source, Symptoms & Solutions
South Asian Experience

Supplement Editors:- Mushtaq A Margoob, Huda Mushtaq



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INTRODUCTION:

Mushtaq A Margoob

Increasingly frequent, massive disasters over the past one year have not only directly impacted many regions of the world, but 'indirectly affected humanity as a whole'. Millions of victims, who have experienced these horrendous events, are vulnerable to considerable emotional turmoil and bodily reactions. The mental anguish of those who narrowly escaped these disasters, or lost close relatives is made worse because many of them have lost their homes, jobs and possessions². With the development of several diagnostic systems that are proving consistent across the populations, the consequences various traumas have become increasingly better understood. Less is however, known about the course of bereavement following violent death. Such sudden bereavement is a very intense stressor. Studies have revealed that conflict situations result in more deaths and disability than any major disease³. The rampant psychological symptoms and syndromes in the populations, in war/conflict situations are consistently being reported in scientific literature. While many people will find a way to cope without intervention, skilled professional assistance may be important in decreasing the morbidity and even mortality of those bereaved, as a result of disaster⁴. In order to provide such assistance, professionals need to be educated about the latest developments in disaster psychiatry.

The WHO guidelines for mental health in emergencies stresses on increased use of community outreach and special focus on offering timely and culturally appropriate interventions; honoring the dignity of the survivors; identifying potentially high risk populations; helping people to reunite with their friends; activities to re-normalize life as much as possible and the assistance with self help information materials⁵. Despite the vast information generated through rigorous research over the past three decades, one of the prominent issues that is yet to be addressed is, whether the psychological sequelae of disasters, including war and conflict, are universal.

Here is a humble attempt to address this issue from one of the world's poorest regions i.e. South Asia. In the year 2005, two natural disasters; snowstorm and a devastating earthquake hit, the field of study (Kashmir) which was already impoverished by 15 years of chronic conflict. The supplementary issue begins with editorial, stressing upon the originality of PTSD as a diagnostic entity and challenging the notion of its being a culturally bound syndrome of the west. The populace of this region has been constantly living under the shadow of threat, as is revealed by a community based study, discussed under the heading of 'Community Prevalence of Trauma in South Asia'.

The high prevalence of stress related disorders in the community, as revealed by the study 'Community Prevalence of Adult PTSD in South Asia' stands as a testimony to a high level of suffering among the masses following natural disasters and manmade conflict.

In February 2005, the fury of nature struck the already suffering people in the form of a snowstorm in South Kashmir. *One Year Longitudinal Study of Snowstorm Disaster Survivors In Kashmir* captures the suffering, morbidity- its magnitude and course, coping strategies and rehabilitation of the survivors. This study keeps an immense importance in the wake of Oct.2005 earthquake, as the concerned prepare for the rehabilitation of its survivors.

Children have been one of the most severely affected groups, and a high level of psychiatric illnesses in them is alarming. This fact is highlighted in '*Paediatric PTSD: Clinical Presentation, Traumatic Events and Socio-Demographic Variables- Experience from a Chronic Conflict Zone, and PTSD Symptoms Among Children and Adolescents as a result of Mass Trauma in South Asian Region*'. Important lessons can be drawn from these to invest for a better future of these otherwise neglected children. '*The Children Living in Orphanages in Kashmir: An Exploration of Their Nurture, Nature and Needs*' and '*Psychiatric Disorders Among Children Living in Orphanages*' address the important issue of mental health, and related problems of children being reared up in the orphanages. They could serve few important guidelines for healthy upbringing of the orphans.

For long, PTSD patients seeking treatment have been considered atypical of the population suffering from PTSD. This fact and many other characteristics of the PTSD patients seeking treatment have been discussed in *Treatment Seeking Post Traumatic Stress Disorder Patient Population*.

Family Study of Adult PTSD Patients in South Asia tries to examine the family characteristics of PTSD patients, and lends an insight into the family attributes of this disorder.

Post Traumatic Stress Disorder in Patients with Substance Use Disorder: Sociodemographic and Relationship Characteristics dissect out PTSD as co-morbidity, and assess its magnitude in substance dependant patients.

Sexual traumatization is very much present and prevalent, but grossly underreported, in eastern society. *'Varying Clinical Presentation in Victims of Sexual Traumatization'* and *'Adult Life Consequences of Childhood Sexual Abuse -Case Report Study'* reveals, how this condition frequently masquerades as other disorders and nonspecific symptoms, rendering it difficult to recognize.

'Somatization in Post Traumatic Stress Disorder: A Brief Report' analyses a few case studies, wherein patients with PTSD presented with diverse somatic complains.

Working in a chronic conflict situation can be taxing for clinicians, leading to a reduced productivity, ultimately adversely affecting both patient care and clinician welfare. *A Study of Burnout among Clinicians as Caregivers in a Chronic Mass Trauma Situation* is an attempt to assess the levels of burnout among clinicians working in turmoil situations.

Though trauma is necessary for PTSD to develop, not all exposed to trauma develop PTSD: the discrepancy being attributed to genetic factors. *'A Preliminary Investigation on Serotonin Transporter Gene Regulatory Region Polymorphism in Posttraumatic Stress Disorder'* explores the possible link of serotonin transporter regulatory gene polymorphism with the risk of developing PTSD.

One of the postulated structural effects of PTSD on the brain is hippocampal atrophy. *'A Preliminary MRI Study of Hippocampal Volume in Chronic Posttraumatic Stress Disorder'* was a controlled study to assess PTSD patients for such changes in the hippocampal volume.

'Pir, Faqir and Psychotherapist: Their Role in Psychological Intervention of Trauma' compares the credibility and role of traditional faith healers to the modern psychotherapists.

'Excerpts from PG Development Programme, 2005' offers glimpses into the Fifth North India PG Development Programme conducted for the first time in Kashmir.

In spite of trying times for mental health professionals, the organizational developments at the global as well as South Asian region over the past year have been very encouraging, as is reflected under the title *Glad Tidings- Inception of Vibrant SAARC Psychiatric Federation under the patronage of World Psychiatric Association : Realization of a Long Cherished Dream*

An eyewitness' experience of the immediate plight of earthquake 2005 survivors is presented in *'Devastating Earthquake: A First Hand Experience.'*

The *Image Gallery* is a collection of select photographs of various mental health activities in the field of disaster and trauma, including a section on the community outreach activities in the disaster hit areas as well.

Some related psychosocial, academic and research aspects have been reflected in **Appendices.**

Working from a stigmatized hospital, with a primitive setup, without even basic amenities any form of research would sound like a joke. Working relentlessly, with sincerity and perseverance against all odds, this supplement has become a reality, which in hindsight is highly satisfying. However, keeping in view the unavoidable limitations and restraints, shortcomings would be unavoidable. All your comments are solicited, in this behalf as they would be of immense help for future guidance.

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POST TRAUMATIC STRESS DISORDER: CULTURE SYNDROME OF THE WEST OR A HIDDEN DIAGNOSIS FOR THE REST

PTSD consists of a complex combination of co-occurring symptoms and mental processes¹. Considering the circumstantial evidence, a mere absence of community prevalence data from the developing world does not justify the assumption that PTSD is nonexistent, or its prevalence is negligible in non-western countries. On the contrary, the risk of developing post disaster/ post traumatic sequelae, like post traumatic stress related disorders may be considerably higher among the population in these settings. Getting exposed to prolonged traumatic conditions associated with sociopolitical unrest, as well as frequent natural disasters amid poor resource, relief and rehabilitation provisions and under developed infrastructure leading to delayed and inadequate post disaster interventions, makes them even more vulnerable.

Kessler while commenting on the individual and societal costs under such circumstances writes "the evidence lead us to believe that the impact will be staggering, that the toll in terms of emotional pain and suffering will be as large as the effect on productive capacity, and that the process of healing will have to be measured in terms of generations, rather than years". Criticism on the validity of Post Traumatic Stress Disorder (PTSD) as a diagnostic category in non-western cultures is waning with each passing day. PTSD, certainly, is not the only possible psychological response to trauma but is one of the many psychiatric disorders that may arise in a minority of people following exposure to trauma. With increasing experience of mental health professionals in dealing with various post disaster psychological consequences in low-income countries, propaganda against PTSD as an invented diagnosis for medicalisation of psychological distress is swiftly disappearing^{2,3}.

The controversy and criticism that the diagnosis of PTSD has been constructed out of political ideas rather than psychiatric is not supported by any logical facts⁴. On the contrary evidence is accumulating that posttraumatic stress disorder is a discrete nosological entity with biochemical, neuroanatomical and phenomenological characteristics that differentiate it from other major psychiatric disorders⁵. Like any other genuine diagnostic entity, post traumatic stress disorder does meet the requirements of the classification systems of facilitating communication between clinicians and researchers, promote research activity, encourage the development of specific treatments, provide information about prognosis, and allow service to be developed^{6,7}.

Much of the controversy around PTSD has been based on indiscriminate use of the diagnosis in civil litigation in the West and the apparent growth of 'Trauma Industry' there, as PTSD is the only psychiatric disorder for which huge compensation can be paid⁸. But all such arguments are totally alien and irrelevant in our context; the ground realities are entirely different here. Majority of such patients belonging to lower socioeconomic status, with inadequate treatment facilities, can desire and avail only the possible 'luxury' of a mental health professional consultation, which also occurs after an average period of 33 months after the onset of PTSD⁹. Arguments like "the diagnosis is a legacy of the American war in Vietnam and is a product of the post war fortunes of the conscripted men who served there" or "the profile of post traumatic stress disorder has risen spectacularly, and it has become the means by which people seek victim status and its associated moral high ground in pursuit of recognition and compensation. Once it becomes advantageous to label trauma distress as a psychiatric condition, people will choose to present themselves as medicalised victims, and join a kind of social movement trading, on the authority of medical pronouncement in a variable trauma industry"¹⁰. This reasoning loses its meaning beyond the frontiers of America. The ground realities at least in the developing world are diametrically opposite. Two third of the South Asian region countries have no mental health programme or policy for their masses; there are no specialized veteran centers in the developing world, nor is any special financial compensation paid to the service personnel diagnosed as suffering from PTSD^{9,10}.

Millions of children, women and elderly people after various disasters continue to be retraumatized for want of basic physical needs like proper shelter or security. Merely because of skepticism expressed by a few individuals due to ignorance and denial, neglecting innumerable victims suffering from disabling post traumatic stress disorder recognized internationally, will not only be unethical but also criminal. Evidence is emerging that exposure to dreadful traumatic situations significantly increases the risk of developing PTSD. Over the years we have been reporting various aspects of presentation of PTSD in our setup^{8,11,12,13}. That PTSD is a relevant

clinical construct in Indian Context, is also supported by a recent (2005) study based on in-depth interviews with 55 women traumatized by the riots in Gujarat, India, in March 2002, which revealed that symptoms described as characteristic features of PTSD in biomedical classification were clearly expressed by these women and attributed by them to trauma¹⁴. Another study, though a preliminary report, on initial earthquake period psychiatric morbidity in Latur survivors showed a high prevalence of Acute PTSD¹⁵. Similar observations about the presence of PTSD in many other South Asian countries are also getting reported¹⁶. Palestinian children exposed to war trauma showed a posttraumatic stress reaction prevalence of 72.8%¹⁷. Many Kuwaitis were reported suffering from undiagnosed PTSD even after 3 years of Iraqi invasion in 1990¹⁸. Most of the individuals suffering from PTSD do not seek professional intervention for their symptoms because of lack of awareness. In a survey of a national sample of 2975 adult patients, primary care physicians in Israel could detect PTSD only in 2% of patients who fulfilled the diagnostic criteria for the disorder¹⁹. So far whatever has been reported on PTSD from India or neighboring countries is restricted to case reports or, at the most patient population seeking treatment at various health care facilities. The detection rate of PTSD in such settings even in the USA is extremely low, even among the population with a high incidence of trauma exposure. Our large community survey of the general population in Kashmir, has confirmed a significant prevalence of PTSD in the civilian adult population¹⁹. Another study provides relevant data on traumatic experiences, with firing and explosions, war zone trauma, death of a close person, physical assaults, life threatening injury or illness, being among the commonest traumas experienced in a mass trauma situation in this part of the world²¹. The current prevalence of PTSD in the studied sample population is 7.27%, and lifetime prevalence is 15.19%¹⁹. Our findings provide evidence of higher prevalence of the disabling posttraumatic stress disorder in politically disturbed areas of South Asia.

Co morbid psychiatric disorders especially depression and substance use related problems are the rule rather than exception, and may be the chief presenting complaint. This may be another significant factor responsible for masking the primary diagnosis of chronic PTSD in majority of such cases. Considering the sequence of its stages, PTSD begins much after the occurrence of the event; when the response does not settle, a progressive dysregulation of psychological and biological homeostasis leads to the development of PTSD. As a disorder of transition it resolves in 60% of subjects and the chronic form continues often for years. The transition phase is of immense importance for future course of events, being the critical interaction period between risk and protective factors.

Undoubtedly some issues regarding the diagnosis and management of post traumatic stress disorder remain to be addressed even in USA²¹. Besides, questions pertaining to optimal treatment dosages, duration of maintenance therapy need to be addressed.

The current PTSD diagnosis mostly described the symptoms resulting from a short lived trauma and does not include the severe psychological harm that occurs with prolonged, repeated traumatizing situations for months and years. These aspects are obviously more pertinent to us living in the developing world with inadequate professional manpower, under developed infrastructure, and meager resources on one hand and the more frequent natural calamities as well as continued man made traumatic situations of years or even decades duration in some areas on the other. Obliviousness to the status quo will get us nowhere as every concerned individual has to contribute for early detection and proper management of the disorder. No doubt human behaviour occurs in the context of culture and community but this statement should not be stretched too far away through many investigations to perpetuate confusion. A six page article titled 'survivors of natural disasters and post traumatic stress disorder' in the largest circulated medical journal of India, 'Journal of the Indian Medical Association', in one of its latest issues, in January 2006 begins with the remarks, "PTSD is a sociopolitical diagnosis rather than a psychological entity", continues with the comment, "In Latur, the study was done on 4376 quake affected patients, and it was found that 74% were having PTSD" and ends with the conclusion, "To conclude we can say that PTSD is not that common in our country, as it is in western countries, because of spiritual background and extraordinary support systems at all levels. The need is to try and adjust to the changed circumstances and equilibrium"²¹. None of these generalized categorical statements are supported with any reference or scientific source. Traumatic stress and its sequelae including stress related disorders are as real a problem for us^{8,19,20}, as for any other subject or group living in any part of the world, and demands in-depth research for our own solutions. This is undoubtedly a tall order but something worthwhile needs to be initiated to move forward to the goal of achieving socioculturally appropriate and clinically effective, preventive and therapeutic modalities to address the ever increasing burden of post disaster related problems in developing countries in general, and Asia in particular.

The findings presented in this supplementary issue of the journal clearly suggest that the detection rate of PTSD in non-western settings can be markedly increased if clinicians particularly, mental health professionals, increase their level of suspicion among patients with depression and functional disability, especially in those with a history of exposure to a traumatic event. If not, the majority of patients suffering from the disabling chronic PTSD will continue to pass silently through the health care service corridors, without ever getting noticed the way they deserve to be.

Mushtaq A. Margoob M.D.
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COMMENTARY

POST DISASTER RECOVERY: ISSUES, IMPRESSIONS AND INTERVENTIONS

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Psychological impact of any catastrophe, whether in the shape of a natural calamity or a human caused disaster, gives rise to a number of stress related reactions and some psychiatric disorders at the individual level. It also leads to a change in previous and emerging social processes as well as shared behaviors of the whole community. Even transgenerational transmission of trauma has been suggested (Volkan2001). The research data available so far, at least from the developing world including India has almost exclusively been restricted to investing all expertise and resources on certain fixated counseling training programmes, stressing mainly on 'class room' type psychosocial intervention models. Often widely publicized, these sporadic stage (satellite) shows especially during the first few months of a disaster get projected as a panacea, aimed at providing mental health care services through 'psychological care' by primary health care personnel, paramedics and community level volunteers after getting trained for a day or two. All of us know that even in the most advanced countries like the USA and UK, more than 50% of individuals suffering from one of the commonest psychiatric disorders i.e., depression are neither diagnosed nor treated by their primary care (family) physicians. This is happening in spite of the most ambitious public/professional, educational campaigning 'Defeat Depression Programme 1992-96' by Royal College of Psychiatrists in collaboration with Royal College of General Physicians in its 30-year-old history. A similar Programme D/ART (Depression Awareness and Treatment Programme) in USA as well as our own efforts through "Defeat Depression Programme" from 1998-2003 in Kashmir has also not produced results much different than the above. Our comments should however not be interpreted as advocating against 'Psychosocial support' to deal with disaster stressors. Education on the likely presentations of psychiatric disorders to primary care physicians, i.e., somatization, grief reactions, depressive symptomatology following violence, spouse and child abuse can go a long way to achieve the objectives of post disaster recovery. Similarly the role of community level volunteers and the key persons in facilitating the process is unquestioned. But the point being emphasized here is that the potential psychiatric morbidity of the disaster community also needs to be considered and pure professional mental health care services made available to the disaster community as per their needs. Otherwise it is doubtful whether all the remaining activities in the name of psychosocial intervention can achieve complete recovery and limit disability of the disaster hit population especially those who suffer from those fully evolved psychiatric disorders with a potential to persist for decades following a disaster. Therefore, it becomes necessary to evolve means and methods of integrating community psychiatric

consultation and psychosocial intervention in such a way that one becomes complementary to the other. This will facilitate the process of problems getting addressed according to the real needs rather than a mere repetition of preconceived set of psychosocial protocols. It becomes further clear if seen in the context of the four phases of disaster responses as identified by Cohen and colleagues (1987). Most of the disaster situations in the country as well as our own observations in the mass trauma situation of more than 15yrs ;one year post-snowstorm disaster period and now at the earthquake impacted areas for last four months, the psychosocial interventions are usually made available during first (immediately following a disaster) and second (from a week to several months) post disaster phase, when in addition to rescue personnel, relatives, friends and neighbors try to heavily support the victims ,all sorts of assistance also flows in from the agencies external to the community. Unfortunately, the slogans and shows end here and hardly any sustained psychosocial help is made available to the survivors during either third phase (up to 1yr) which is marked by disappointments and resentment, when aid and restoration are not made, nor during the final phase (may last for years) when survivors are struggling to make houses and find work. During the third phase the strong sense of community usually weakens as individuals focus on their personal concerns, and during the final phase the resolution of the initial psychological and somatic symptoms is required to recover psychologically from a disaster. As is clear from this the psychological interventions during these stages means to help addressing these issues rather than asking the survivors only to continue with 'taking deep breaths' and 'clenching the fists alternately', or more commonly abandoning these victims completely. Even in the first and second post disaster phases, the psychosocial care providers need to be made to understand that as noted by Kingston and Rosser, in times of disaster "the most important aspect of psychological care is the social provision of the physical care, i.e. physical care is psychological care and this is the prime and essential function of relief organization during the initial disaster period". Moreover conventional wisdom based psychological measures at this stage, like immediate psychological help to assist the sufferers to 'ventilate' their feelings etc. can lead the survivors nowhere. Such attempts of psychosocial help have been challenged recently. More than a dozen controlled trials have shown conclusively that such immediate psychological debriefings do not work, rather worse, that receiving such counseling actually increased the likelihood of later psychological problems "whereas immediate post trauma counseling may reassure the rest of us that something is being done, it does not actually help those who receive it" laments Wasley, the author of this

article (NEJM, 2005, 6, 353: 548-550).

However, if psychosocial interventions are provided after clearly understanding the essence, role and limitations of such measures, they can be of real help in addressing most aspects of 'normal reactions' (non pathological psychological/emotional reactions) to 'abnormal situations' (disasters etc). Otherwise, much can not be expected from attempts to merely copy them in non-western countries, without subjecting such measures to any longitudinal scientific scrutiny on ground realities different not only because of sociocultural milieu but also nonavailability of trained manpower, infrastructure, lack of education and poor socioeconomic status, as well as different resilience and coping strategies. Moreover, the condition in Kashmir is definitely different not only from the west but even from other disaster sites of the country like Bhopal (Dec1984), Bhuj (Jan2001), Tsunami (Dec2004), etc. Based on our observations of past 15 years in multiple roles including association with various governmental and non-governmental organizations as the local expert which includes most of the international, national and local organizations working here in the area of mental health care, one finding that has made itself starkly clear again and again is that, in addressing the 'normal reactions to abnormal situations' as the exclusive psychosocial interventions paradigm, all the abnormal reactions (psychiatric disorders including stress related disorders) to abnormal situations usually become the first casualty. Statements like 'It is important not to present emotional needs as deviance, as this approach would stigmatize individuals and lead to denial for help' probably has got so much concretized while importing it from the west that not only do the community level volunteers avoid talking about 'psychiatric disorders' in their own right, but even paramedics and primary care physicians are not getting sensitized to identifying these sufferers. This is also clear from the absence of increase in referral to various psychiatric services by the psychosocial caregivers in contrast to the ever-increasing number of cases referred by earlier treated patients and spiritual/faith healers and urban area medical professionals, though many of such cases report having been through the 'Psychosocial interventions' by various organizations and individuals for months. Another reason for not getting the desired results is the approach that, since psychiatric morbidity may not be universal, therefore 'Psychosocial intervention' through proven and unproven methods of help get projected as the most appropriate answer to all the mental health problems arising after a disaster. Instead, what is needed is that all such efforts be focused on the main objective of facilitating a process of reaching all underserved traumatized disaster survivors whether with psychosocial problems or a diagnosable distressing psychiatric disorder. A little further objective analysis of the above observations makes it amply clear that all people and organizations involved in rendering their dedicated services in disaster areas are sincerely trying to ameliorate the psychological distress of suffering survivors, and need to be appreciated for their noble efforts. But, at the same time a better understanding into the whole dynamics of post disaster psychological consequences need to be

inculcated and made readily available to all of them so as to enable the community level workers as well as the key persons to identify psychiatric patients and provide them proper guidance for management, in addition to carrying out the psychosocial interventions among the distressed individuals in a disaster community. Disaster situations are known to increase psychiatric morbidity as revealed by a large body of research, elsewhere. This is also strongly supported by our own studies in both manmade as well as natural disasters. Studies have revealed that an individual experiencing a traumatic event has an increased probability of getting exposed to two or more traumatic stresses over lifetime (Breslau 1991). Our population unlike others before the earthquake natural disaster survivors, i.e. Marathwada and Bhuj earthquakes or Orissa cyclones, studied in India has already suffered over a prolonged period, a wide variety of traumatizing stressors of war zone or chronic conflict related traumas which are likely to adversely effect psychosocial functioning in a number of ways. As indicated by our published data, as well as from our clinical experience, the prevailing sociopolitical situation over the years, in Kashmir, had already led to a phenomenal increase in the psychiatric morbidity before the earthquake. This has enormously increased the mental health care needs of the population in general and earthquake disaster victims in particular as they are living in areas of difficult and remote terrain without any psychiatric service facility available anywhere in their districts. Of the many people exposed to a disaster stress, although only a minority ultimately develops full-blown psychiatric disorders, a significant proportion of population also suffers from a dissatisfied life on account of unrecognized subsyndromal psychiatric problems and various psychosocial problems and post disaster adjustment difficulties. Therefore, psychiatrists have to use a wide spectrum of skills in providing care to disaster victims. Overall psychiatric intervention after a disaster has to be based on the principles of preventive medicine and includes community consultations and outreach programme with the goals identifying high risk groups, promoting community recovery and minimizing social disruption (Ursano et.al 1995).

One of the basic tasks in assessing the mental morbidity is firmly establishing the presence of specific symptoms of a disorder in accordance with the criteria defined by a particular diagnostic system. By using the epidemiological training as well as the traditional skills of diagnosis, treatment and consultation, psychiatrists can significantly contribute to the primary prevention of psychopathology. An understanding of the predictive structure and the course of the behavioral and psychosocial responses following a disaster can facilitate this process (Breslau et.al 1991). Besides PTSD, Major depression, substance abuse, generalized anxiety disorder and adjustment disorder have been diagnosed in individuals exposed to disaster (Goldberg et.al 1990; Margoob et.al. 1995, 1996). Moreover absence of immediate symptoms following exposure to a disaster is not necessarily predictive of long-term positive adjustment. Depending on a variety of factors including personal and cultural characteristics, orientation towards

coping with post disaster stresses and painful emotions as well as the efficacy and adequacy of rescue, relief, rehabilitation and reconstruction operations, which will shape responses of the population to the Kashmir earthquake.

Psychosocial sequelae of different disasters may look similar, but it is not so. A comparison between Armenians traumatized in the ethnic conflict between Armenians and Azerbaijanis during the same year revealed that after 18 months and again after 54 months, no significant differences were observed in the severity, profile and course of PTSD between subjects exposed to severe earthquake trauma versus the patients exposed to severe trauma. Going only by the apparent symptoms can unfortunately be erroneous because hidden individual psychological process and societal processes following a natural disaster ultimately tend to accept the event as fate or the will of God (Lifton). In case of war or conflict trauma a different cognitive picture of an identifiable enemy group deliberately inflicting pain, suffering and helplessness on its victims gives rise to totally different coping mechanisms, resilience and risk profile of the survivors. Disasters deliberately caused by others can lead to shifts in societal conventions and processes including an increased sense of rage and entitlement to revenge when mourning loss, or reversal of feelings of helplessness and humiliation. Trauma can get passed on to the next generation as a result of parents getting adversely affected by the humiliation and torture of 'others' in a conflict situation. Besides other maladaptive societal

processes also lead to formation of adolescent gangs after acute phase of shared trauma, that get heavily involved in crime that essentially had been non-existent in the society. The pattern has been earlier reported from Kuwait, Tiblasi, Georgia, Armenia¹⁵ and many other countries.

The interaction at the interface of society, technology and environment in developing countries essentially determines the outcome of disasters¹⁶. There is a need to frame a timely and well-framed policy to solve disaster related problems. Raising the awareness regarding the coping mechanisms for disasters especially at places like Kashmir should be given a top priority for measures of post disaster recovery. It is necessary to sensitize policymakers, administrators as well as other concerned people to manage disasters and support survivors. Attention needs to be paid to higher risk groups like women, children and elderly. Strong policy support and guidance mechanisms are a must to see the disaster programmes effective and fully meaningful. Disaster myths, as also pointed out by Goyet¹⁷ in a lucid write-up in *Lancet*, need to be stopped forthwith. Mental health care service providers including non-governmental organizations working in this field need to be educated and updated about "the need for early treatment and identification of the most vulnerable for serious psychiatric consequences is needed, so that guidelines can be established and rumors about popular, untested or even harmful treatments can be quelled¹⁸".

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SECTION - I

Caught in a situation of escalating conflict on one hand and natural calamities on the other..... when death is the truth and life an illusion, the loss will be measured in terms of generations, rather than years

COMMUNITY PREVALENCE OF TRAUMA IN SOUTH ASIA - EXPERIENCE FROM KASHMIR

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Trauma is an inevitable part of human existence, especially in a conflict situation. This fact assumes even greater importance in the light of the fact that trauma could play a key role in the genesis of various psychiatric problems. With this impression a community based survey, assessing the prevalence of traumatic events, was undertaken in Kashmir province. The study was conducted in four districts of Kashmir province on adult subjects. The subjects were assessed using a checklist of 13 possible traumatic events, drawn from other major epidemiological studies. Evaluation yielded a lifetime prevalence of traumatic events of 58.69% (males = 59.51%, females = 57.39%), with firing and explosions being the commonest traumatic events encountered (81.37%). Importantly, the trauma exposure rates in males and females were similar, holding significance in view of the State of chronic conflict prevalent here. (JK-Practitioner 2006; 13(Suppl 1):S14-S17)

Keywords: Trauma, conflict, traumatic events, psychiatric problems.

Introduction

A substantial body of literature documents that individuals experience traumatic events far more commonly than previously believed. Epidemiological studies carried out in U.S.A. estimate that between 36-81% of general population experience a traumatic event at some times in their lives^{1,2}. Other studies estimate a lifetime prevalence of traumatic exposure of 40-80% in adults^{3,4}. In Australia, Rosenman found that 57% of general population sample of adults (18 years and older) reported a positive life history of experiencing one or more traumas⁵. The National Comorbidity Survey in America estimated the lifetime exposure to any trauma among men and women at 60.7% and 51.2% respectively⁶. Similarly, the Australian National Mental Health Survey reported the lifetime exposure to trauma among men and women at 64.6% and 49.5% respectively⁷.

Awareness of the role of psychological trauma in the causation of various psychiatric problems has waxed and waned throughout the history of psychiatry⁸. It has been known that pathological stress response syndromes can result from exposure to war, sexual assault and other types of trauma⁹. DSM III adopted the definition of traumatic event as "stressor that would be markedly distressing to almost anyone"⁹. Later on DSM IV added a further dimension by introducing the stressor criterion "the person experienced, witnessed or was confronted with an event that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others" and "the person's response involved intense fear, helplessness or horror"¹⁰.

Traumatic events and the way people cope with them have a crucial role in development of Posttraumatic stress disorder (PTSD)¹, major depressive disorder (MDD)¹¹, generalized anxiety disorder (GAD)¹¹, somatization¹², and dissociative disorder¹².

As a result of data provided by National Comorbidity Survey (Kessler et al, 1995)¹, the Detroit Area Survey (Breslau et al)¹¹, the National Women's Study (Resnick et al, 1993)⁵, and other large scale epidemiological studies in U.S.A.^{12,13} and Australia (Creamer et al, 2001)¹⁴, knowledge of the prevalence of trauma and Posttraumatic stress disorder (PTSD) is now extensive from developed countries, especially U.S.A. and Australia. Despite the quality of work that has been conducted in recent years, our understanding of the epidemiology of trauma is not without limitations. Distinctly marked is the absence of international representatives in the research base as a whole¹⁶.

Only few epidemiological studies on trauma or PTSD in general populations have emerged from poor and economically developing countries¹⁷, although some recent research has begun to improve our understanding of trauma in poor, war torn countries¹⁸.

Wars, natural catastrophes and other disasters affect large population in different parts of the world. The exposure to the traumatic events is particularly high and rises manifold when the fight takes the form of guerrilla warfare, which extends for a long time. These man made disasters result in great loss of property and enormous death and destruction among the population. Data reveals that in the prevailing conflict situation over the past fifteen years in Kashmir, there has been a phenomenal increase in psychiatric morbidity, including stress related disorders¹⁹. Keeping in view all these facts the need to assess the occurrence and pattern of traumatic events, as contributory factors in the causation or precipitation of various psychiatric disorders including stress related disorders in the community, is of foremost importance. In keeping with the above-mentioned factors we conducted a study to find out the prevalence of traumatic events in the general

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population, in a chronic conflict situation from the developing world.

Methods:

Sample

The survey was carried out in four districts, comprising a population of 4197268 individuals, in Kashmir valley of Jammu & Kashmir State (India). A total of ten villages from each district were taken for the study, with appropriate urban area representation. The areas have been delineated as per the latest census report of 2001²⁰. All the individuals included in the study were above 18 years of age. A sample of 300 individuals from each district with a total of 1200 were selected. The study was carried out from March 2004 to September 2005.

Data Collection Procedure:

- Working Team:** It comprised of a team of trained/trainee psychiatrists led by the first author.
- Area Selection:** The working team identified the geographical areas for carrying out the survey. This survey was carried out in four districts of Kashmir valley namely Srinagar, Anantnag, Baramulla and Pulwama. Areas were delineated as per the latest census report 2001²⁰. A total of ten villages from each district were taken with appropriate urban area representation.
- Population:** All the individuals included in the study were more than 18 years of age. Permanent residents of the area domicile for more than 2 years were taken; temporary visitors to the area were excluded.
- Instruments:** Respondents were asked 13 possible traumatic events drawn from other major epidemiological studies. These were designed to include events commonly reported in most populations and to be consistent with stressors identified in the revised edition and the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III – R and DSM IV)^{1,21}. In each case of traumatic event we asked if the trauma had happened, was witnessed, learned about, not sure, or does not apply, to the subjects interviewed and only those events were taken which had been severe in intensity, as per DSM IV laid down criteria. The 13 events asked for were: (i) Natural Disasters (e.g. floods, earthquake, landslide, avalanche, snowstorm etc.) (ii) Fire or Explosion (iii) Transportation Accident (e.g. motor vehicle accident, boat accident, plane crash etc.) (iv) Serious Accident other than transport (e.g. accident at work place, recreational activity etc.) (v) Exposure to toxic substances (vi) Physical assault (e.g. being shot, stabbed, threatened with knife, gun etc.) (vii) Sexual Assault (e.g. rape, attempted rape, made to perform any type of sexual act through force or threat or harm) (viii) Other unwanted or uncomfortable sexual experience (ix) Combat or exposure to war zone (e.g. in military or as civilian) (x) Life threatening illness or injury (xi) Severe human suffering (xii) Sudden violent death (e.g. homicide, suicide) (xiii) Sudden unexpected death of someone close.

Results:

Sample:

A total number of 1200 people were selected for the study, but only 671 consented to participate and included 61.84% (n=415) males and 38.15% (n=256) were female.

Mean age

Mean age for the whole sample was 38.28 years (n=671) while as it was 37.93 years for males and 38.84 years for females.

Prevalence of Trauma

The total lifetime prevalence for any traumatic experience was 58.69%. It was 59.51% in males and 57.39% in females.

Table 1

Gender	Number of subjects	% of subjects	Mean Age	Prevalence of Trauma (%)
MALE	415	61.84	37.93	59.51
FEMALE	256	38.15	38.84	57.39
Total	671	100	38.28	58.69%

Prevalence of different Traumatic events:

The highest prevalence for any traumatic event (table 2), was for fire or explosion 81.37%, accounting for 82.4% in males and 79.68% in females. Following this the next most common traumatic event was combat or exposure to war zone, which was 73.23%, accounting to 75.18% in males and 70.31% in females. The lifetime prevalence for exposure to natural disaster for males was 15.80% and 14.01% in females with an overall prevalence of 13.56%. Least common type of trauma reported was sexual assault in males i.e. 6.5% while as it was 12.1% in females and 8.64% overall. Other unwanted or uncomfortable sexual experience accounted for 6.26% in males and 10.93% in females with total prevalence of 8.04%.

Table 2

TRAUMA	MALE (%)	FEMALE (%)	TOTAL (%)
Combat or Exposure To War Zone	75.18	70.31	73.32
Firing or Explosions	82.4	79.68	81.37
Life threatening Injury or Illness	40.72	35.93	38.89
Natural Disasters (eg Landslide, Avalanche, Snowstorm, Earthquake)	15.8	14.01	13.56
Physical Assault (eg being shot, stabbed, threatened)	53.97	32.42	51.71
Serious Accidents, Other Than Transport	22.16	15.23	19.52
Severe Human Suffering	41.92	33.59	40.08
Sexual Assault (eg rape, attempted rape, etc)	6.5	12.1	8.64
Other Unwanted or Uncomfortable Sexual Experiences	6.26	10.93	8.04
Sudden Death of Someone else Close to You	45.3	35.54	54.11
Sudden Violent Death (suicide/homicide)	24.46	28.12	27.17
Transport Accidents	39.27	15.23	30.1
Exposure To Toxic Substances	13.97	5.85	10.87

Discussion:

Our study provides the first community-based estimates of trauma exposure in South Asia based on the experience of trauma exposure in a sample of 617 subjects from four districts of Kashmir valley, representing both urban and rural areas. This study revealed very high prevalence of

trauma exposure in general population. Half of the selected subjects opted out of the study due to prevailing socio-political reasons, who if included might have projected even higher rates.

Lifetime prevalence for any traumatic experience was 59.51% in males and 57.39% in females, with the prevalence only about 2% more in males than females. In contrast with the findings by Kessler et al 1995 from National Comorbidity Survey, where it was 60.7% for Men and 51.2% for women¹. The types of trauma experienced by the largest proportion of people was firing or explosion (82.4% in men and 79.68% in women) followed by exposure to combat or war zone (75.18% in men and 70.31% in women). These two types of trauma formed the largest group of traumatic events experienced by the people. As the number of males and females exposed to trauma are equal this may explain the reason for almost similar lifetime prevalence of any traumatic event in both males and females, which is explained by the fact that the study has been conducted in a chronic conflict area, with mass trauma exposure of the whole community, in contrast to the sample of National Comorbidity Survey¹ which was done in a population where this type of trauma was almost absent.

A significantly higher proportion of men than women reported experiencing events like transportation accidents (males 39.27% and females 15.23%), other serious

accidents (22.16% in males and 15.23% in females) and physical assault like being shot, stabbed or threatened (53.97% in males and 32.42% in females).

A significantly higher proportion of females reported experiencing sexual assault (12.1% in females and 6.5% in males) and other unwanted sexual experience (10.93% in females and 6.26% in males) which may still be an under representation of such events, because of under reporting due to socio-cultural factors²². The prevalence of exposure to disaster is almost equal in both males and females (15.80% in males and 14.01% in females) which is in accordance with the findings of Norris 1992 who found lifetime exposure to disaster of 13%².

Commonly, studies have revealed that while trauma is a common experience, the development of posttraumatic stress disorder is not¹⁰. The lifetime prevalence of PTSD in National Comorbidity Survey (Kessler et al 1995)¹ was 7.8% whereas our study revealed a lifetime prevalence of 15.9% PTSD in community²¹. This may be due to the fact that our study has been conducted in a conflict area in contrast to Norris et al and Kessler et al, who conducted studies in peace zone prior to September 11, 2001. A study by Somasundaram 1994 in Sri Lanka, another chronic conflict zone, found 27% prevalence of PTSD, but he assessed people only exposed to combat which might be a confounding factor²⁴.

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COMMUNITY PREVALENCE OF ADULT POST TRAUMATIC STRESS DISORDER IN SOUTH ASIA: EXPERIENCE FROM KASHMIR

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PTSD is one of the many responses of trauma. Previously believed by many to be prevalent only in the west, it has recently been understood to be of worldwide occurrence. Little, however, has so far been documented about PTSD from the developing world. A community study was undertaken, aiming at evaluation of the presence and magnitude of adult PTSD in a region from South Asia. The survey was done in all the 6 districts of Kashmir, selecting a total of 2391 adult subjects randomly. They were assessed using DSM IV based MINI neuropsychiatric interview. Assessment yielded a current PTSD rate of 7.27% and lifetime PTSD rate of 15.19%. Importantly the rates in males and females were comparable. The implications of such high rates and possible interventional strategies are discussed. (JK-Practitioner2006;13(Suppl1):S18-S25)

Keywords : PTSD, developing world, community, prevalence, mass trauma.

Introduction

The human race has progressed with passing ages, but not without a cost. Each era of development has seen man being burdened with stresses and traumas, and consequently their repercussions. The realization that traumas of varying nature have a mental connotation, rather than only physical, may have added a shade to the meaning of the term. The study of trauma related psychiatric disorders is naive, with attempts having begun long back, but it is not till recently that the effects of trauma on human psyche has begun to be clearly understood.

The theory, that trauma can affect the human mind and present with a peculiarity, has sailed itself out of doldrums of 'Railway spine', 'Hysteria' and 'Compensation Neurosis', into a still evolving, and challenged, but a well-described entity of PTSD. The objectivity of PTSD has been described by the DSM system of classification¹. Till recent past, the knowledge about PTSD relied almost entirely on the data based on studies of war veterans and disaster victims².

Although, following the inclusion of even natural but sudden and unexpected death of a loved one in the traumatic event list, and the introduction of a subjective response component of intense fear, helplessness and horror in its definition, DSM IV has widened the scope of PTSD epidemiology, but still only a small number of studies have been conducted so far. Such studies not only provide the prevalence of PTSD in the general population, but also its distribution across different subgroups, as well as help identifying predisposing risk factors and the natural history of impact of trauma related disorders^{3,5}. In various general population studies from the developed world, 15-24% of people exposed to traumatic events have been reported to develop PTSD^{6,7}.

Careful definition of the stressor criterion of a traumatic event has provided a benchmark for epidemiological research. National Comorbidity Survey

(NCS) of the USA⁶ reported that more than 50% of adult community have been exposed to such traumatic events, a finding that challenges the original notion that these events are outside the range of usual human experience. Community based survey showed PTSD to be the commonest anxiety disorder⁶, with a lifetime prevalence of 8%⁶ in adults, and female: male prevalence ratio of 2:1⁶.

The Epidemiological Catchment Area (ECA) survey, one of the largest in the field of psychiatry, was carried out in three different regions of the USA, with patients from different communities, reflecting prevalence and potency of different traumas. The St. Louis study done in two waves revealed lifetime prevalence of PTSD at 0.5% in males and 1.3% in females in general population, and rates being 15% in males and 10% in females, in populations subjected to trauma⁷. The North Carolina site study revealed lifetime prevalence of 1.3 %⁸. The Detroit/Michigan site study revealed lifetime trauma exposure of 39.1 %, with 23.6% of the exposed progressing to PTSD, yielding a lifetime prevalence of PTSD at 9.2 %³. Although the USA studies have reported a prevalence rate of 25% to 80% of trauma, among some of its population subgroups, only a fraction of them develop PTSD^{9,10,11,12,13}.

In a study conducted via telephonic interview, using DSM-IV PTSD check-list on 1002 subjects, in mid-sized Midwestern Canadian city, 2.7% females and 1.2% males were diagnosed full PTSD, while 3.4% females and 0.3% males showed partial PTSD (A fewer than required DSM IV criterion C or criterion D symptoms.)¹⁴.

In another study on earthquake victims in two villages in China at different distances from the epicenter, using both DSM IV & DSM IIIR criteria, it was found that the village with high level of initial exposure to earthquakes, and a high level of post quake support had less frequency of PTSD (19.8%, at 9 months), than the village with a lower level of initial exposure and less post quake support (30.3% at 9 months)¹⁵.

In a community sample of adolescents, the lifetime prevalence of PTSD was reported as 6.3%¹⁶.

Another important source of knowledge about PTSD prevalence and trends has been the war veteran group studies from the USA. In National Vietnam Readjustment study¹⁷, 15% males active in war operations had a current

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episode of PTSD and 11% had a partial PTSD, in comparison to 3% prevalence in the same era Veterans who did not serve in South East Asian Region (SEAR), and 1% prevalence in civilian controls. The same study puts the lifetime prevalence of PTSD at 30.9% for males and 26% for females¹⁸. Another study noted a prevalence of 15% among Vietnam veterans, 20yrs after war¹⁷. A very high prevalence rate (50%-70%) of PTSD has been reported among the Prisoners of War¹⁹ with 40 year prospective study on World War II (WW2) victims revealing rates of 47% and 50%, in males and females respectively^{20,21}. Studies have also revealed a 20% to 40% PTSD rates following terror attacks^{22,23,24}. The prevalence studies in resettled refugees, especially in SEAR²⁵ furnished rates of >50%. Pertinently, 65% of Bosnian refugees resettled in USA suffered from PTSD, while 72.8% of Palestinian children exposed to war trauma experienced PTSD^{26,27}.

Majority of a small number of studies available so far from the developing world are mostly based on clinical samples, which represent only a small fraction of the total population with this disorder. Recently, however, some reports based on community prevalence have started emerging. A general population study carried out by Somasundaram, *et al* (1991) in war affected areas of Sri Lanka, in the age group of >15 yrs, revealed that approximately 50% subjects had experienced between 5-9 war stresses, and only 6% had not experienced any. 64% of the population had developed psychosocial sequelae, including somatization (41%), PTSD (27%), other anxiety disorders (26%), MDD (25%), and other Including Substance Abuse and Personality problems²⁸.

Following the devastating Tsunami, Norris in January 2005 reviewed the empirical research on the psychosocial consequences of natural disasters in developing countries²⁹. Out of a total of 52,061 individuals from 121 distinct samples from 62 different natural disasters around the world, it was observed that 37(31%) resided in developing countries. 89% of the developing country samples after natural disasters exhibited specific psychological problems, and 81% of the sample had PTSD²⁹.

Not much published or detailed study material has so far been available from India, except a few national and international conference presentations^{30,31,32}. This extreme paucity of scientific literature was also clearly reflected in the presidential address at 56th-Annual National Conference of Indian Psychiatric Society in 2004. The president, referring to this subject noted "The published Indian data in this area is dismally minimal"³³. A brief study on victims of a bomb blast in a bus, by Gautam *et. al*, reported 35.4% psychiatric morbidity at day 3, and 29.3% after 2 weeks. After 2 weeks the most common ICD-10 psychiatric diagnosis reported was PTSD (12.9%), followed by depression (9.6%), and dissociative amnesia (6.4%)³⁴. Another preliminary study on initial post earthquake period psychiatric morbidity reported a prevalence of 23% of PTSD in 56 subjects studied³⁵. Some research reports on various disasters in India, if followed up with scientific zeal can also pave away for availability of valuable scientific data in this important area³⁶⁻³⁸.

Jammu and Kashmir has been witnessing a continuous mass trauma situation for more than 15 years, with thousands of people dead, maimed and mutilated, many missing or confined, thousands of children orphaned, and women widowed, a colossal damage to the property, and a damage to the cultural ethos including en-masse migration of a minority community. The amount of trauma incurred, hence, remains anything but hard to imagine. The fury unleashed by natural disasters (snowstorm and earthquakes to recount a few) during the same time cannot be undermined either.

Patient population based studies conducted so far have clearly testified to the fact that a majority of people living in Kashmir are suffering from psychological problems and a significant segment of population have developed some kind of mental disorder, be it depression³⁹, trauma related disorders^{32,31} or substance abuse^{40,41}, to name a few. Mental disorders both in men and women have shown an alarming increase, when compared to a yearly average of 1200-1400 patients seeking treatment during 1980's⁴². In year 1990 about 1700 patients visited Kashmir's sole psychiatric services of the department, but in year 2002 the number had gone up to 48000. By December of 2004, 62000 patients had already visited the psychiatric services of the department⁴³. The studies based on these patients found women and children to be the worst hit^{31,45-47}. PTSD was a rather unknown diagnosis in pre-90s era^{42,31}, but a sizeable number of outpatient cases were found suffering from it, besides depressive disorders³⁹. These patient population based figures are just the tip of the iceberg, whose chunk remains buried in the society, held by social ostracism associated with visiting mental healthcare persons or services. Working under such circumstances, with inadequate manpower and infrastructure, in these trying times created a unique learning experience for medical professionals. This was particularly true for the handful of mental health professionals who, following the mysterious fire which gutted almost the whole structure of the only psychiatric diseases hospital of Kashmir in the mid 90's, had to render services for years to an ever increasing number of emotionally disturbed masses from a petty 6 x 9 ft trench type room.

Researchers, even in USA are still debating about the extent of the problem of post traumatic stress disorders among their population². Existing international scientific data suggest that the prevalence, clinical profile and risk factors for PTSD in the community can not be accurately described on the basis of the patient population seeking treatment, as they are rather atypical of the total population with the illness⁴⁸ and represent only a small fraction of the disorder⁸. The present study was therefore undertaken with the main objective of studying the prevalence of posttraumatic stress disorders in the community, in an area of the developing world that has witnessed both man made (chronic conflict situation) and natural disasters for quite sometime now. This is the only way to enable the society to analyse the dimensions of trauma in its real perspective, as well as to understand related problems, its risk and resilience parameters, for focusing on better coping strategies. This should also facilitate the work of service policy planners and health

administrators to center their attention on the need to develop various service modules built on firm evidence based scientific foundations.

Materials and Methods

Sample:

All the individuals included in the study were above 18 yrs of age. A sample of 500 individuals from each district, with a total sample of 3000 was selected. The study was accomplished between September 2003 and August 2005. Data Collection Procedure

a) Working Team:

It comprised of a team of trained/trainee psychiatrists, headed by the first author.

b) Area Selection:

After identifying the geographical areas for the study as explained elsewhere⁴⁶, the survey was carried out in all six districts of Kashmir province, namely, Srinagar, Baramulla, Anantnag, Pulwama, Budgam and Kupwara. Areas were delineated as per the latest census report of 2001⁴⁷. A total of 10 villages from each district were taken with appropriate urban and rural representation.

c) Population:

All the subjects involved in the study were above 18 yrs of age. Permanent residents of the area (domicile for more than 2 yrs) were included. Sample size from each district was selected randomly.

d) Instruments:

The instrument used for screening and subsequent interviewing of cases was based on MINI screening and MINI Neuropsychiatric interview (M.I.N.I), according to DSM-IV laid down criteria. Validation and reliability studies have been done, comparing M.I.N.I to the SCID-P and CIDI. The results of these studies show that the M.I.N.I has acceptably higher validation and reliability scores and can be administered in a much shorter period of time than the above referred instruments. Clinicians can use it after a brief training session³¹.

e) Interviewing and Collection of Data:

The subjects were briefed about the interview by a trained psychiatrist. Sociodemographic details were collected from the head of the family. After proper consent, the individuals were interviewed separately, and information recorded. Six hundred and nine subjects dropped out after consenting initially for the interview, leaving a total of 2391 subjects to be assessed in detail. Allocation of subjects to different economic strata was done on the basis of monthly income, with following sub-groups

- i) Lower class - earning < Rs. 3000/month
- ii) Lower middle class - earning Rs. 3000-5,000/month
- iii) Upper middle class - earning Rs. 5000-10,000/month
- iv) Upper class - earning - > Rs. 10,000/month

Responses regarding the pre-dominant coping method used to tide over the traumatic events were also recorded. Statistical tests for two propositions were used to obtain p-value.

Results and Observation (Tables A - D)

A. TOTAL SAMPLE STUDIED, AND DIAGNOSIS

	Total	Male	Female
	2391 (100%)	1473 (61.6%)	918 (38.4%)
PTSD (current)	174 (7.27%)	105 (7.13%)	69 (7.51%)
PTSD (life time)	363 (15.91%)	216 (14.66%)	147 (16.01%)

B. SOCIO-DEMOGRAPHIC PROFILE

1. Age Distribution

Age Intervals	Number	%age
18-32	705	29.48
33-47	813	34.01
>48	873	36.51

2. Marital Status

Marital Status	Number	%age
Married	1446	60.47
Unmarried	777	32.51
Widowed	129	5.39
Divorced/separated	39	1.63

3. Socio-economic Status

Class (Based on monthly income)	Number	%age
Lower class	378	15.83
Lower middle	492	20.57
Upper middle	663	27.72
Upper class	858	35.88

4. Occupation

Occupation	Number	%Age
Full time job	973	40.69
Part time job	612	25.59
Unemployed	806	33.72

5. Education Profile

Education	Number	%age
Illiterate	1076	45.00
Undergraduates	695	29.09
Graduates	383	16.01
Postgraduates	129	5.39
Professional graduates	108	4.51

C. MEAN AGE OF THE DIAGNOSED SUBJECTS

1. PTSD (current)

Sex	Mean age (Yrs)
Male	34.42
Female	37

2. PTSD (life time)

Sex	Mean age (yrs)
Male	39.18
Female	40.71

D. COPING STRATEGIES USED

1. Surrender to the will of God, i.e., prayers, visiting shrines etc.	57.50%
2. Sharing with relatives, neighbours and friends	19.00%
3. Stop talking	6.25%
4. Keeping oneself busy	5.25%
5. Aggression	2.00%
6. Tobacco	3.00%
7. Drugs/Medication	1.50%
8. Alcohol	0.50%
9. Cannabis	5.00%

As is clear from table D following exposure to traumatic events 57.5% of our subjects had used recourse to religion as a coping method while 19% had shared experiences with relatives, neighbors and friends to overcome the crisis. 6.25% had stopped talking, 5.25% had kept themselves busy. 2% had switched to aggression while 5% (3% tobacco, 1.5 drugs/medication and 0.5% alcohol) had taken to substance use to relieve the grief.

Diagnosis:

In the sample of 2391 subjects, 174 fulfilled DSM-IV criteria for current PTSD, yielding a prevalence rate of 7.27% (7.13% in males, 7.51% in female). Life time prevalence of PTSD emerged out to be 15.19% (n=363).

Lifetime prevalence of exposure to traumatic events, and PTSD.

Study	Exposure to Trauma (%)		PTSD (%)	
	Men	Women	Men	Women
Breslau et al 1991	43	36.7	6	11.3
Norris 1992	73	64.8		12.3
Resnik et al			5	10.4
Kessle et al 1995	60.7	51.2		13.8
Breslau et al 1997		40		
Stein et al 1997	81.3	74.2		
Breslau et al 2001	59.5			
Margoob et al	59.51	57.39	14.66	16.01

*Courtesy: Breslau N. J Clin Psy 2001; 62(Supplement 17); 16-22.

Discussion

Community based studies of PTSD, using trained clinicians for assessment in a traumatized population are rare, not only in the developing world but even in highly developed and wealthy nations like the USA (that too following disasters like 9/11), mainly because of enormous expenses and time demands of such studies⁵².

The study sample (n=2391) examined shows a predominance of males (n=1473) over females (n=918). This could be explained on the basis of existing gender discrepancy in the population⁵³ and lesser social inhibitions over participation in the study in males.

The high rates of lifetime PTSD prevalence (15.19%) that emerged, when extrapolated to the whole population of Kashmir (54,76,970), shows that approximately 8,31,952 people have a life-time PTSD. This rate resembles higher than usual rates found in studies on populations subjected to overt trauma^{6,3,7,8}. This may be explained on the grounds of chronic conflict that has been persistent here for a long time as well as the frequent occurrence of natural disasters. Moreover, the prevalence rate is closer to that in those populations subjected to terror attacks²². Our results of current PTSD are in agreement with the results of the second month epidemiological telephonic survey after 9/11, 2001, reporting a current rate of 7.5% PTSD among Manhattan residents, south of 110th street⁵¹.

The study revealed that a total of 63.49% (n=1518) subjects belonged to the productive age group (18-47 yrs.). This could be due to the fact that young people are more prone to get exposed to traumatic incidents^{54,55}. Also the

mean age of patients with current PTSD in males (43.42 yrs) and in females (37 yrs.) has an important economic implication on the society, since this age group is economically the most generative one and PTSD patients are known to spend ten times more time in hospitals than depression patients⁵⁶. The current PTSD rates are comparable in males and females (7.13% in males vs 7.51% in females) (p<0.05) indicating an almost equal distribution of PTSD in the two sexes, which is different from the findings from west, where a 2:1 ratio in female vs males PTSD has consistently been reported¹. This is in accordance with our hospital based treatment seeking sample study, where again female and male PTSD rates were comparable⁵⁷.

Similarly, lifetime PTSD rates of 14.66% in males and 16.01% in female samples are higher than found in studies on general population not exposed to trauma, but close to levels in traumatized populations found in the ECA survey in USA⁷ and by Shalev in Israel⁵⁸.

Most publications on prevalence of PTSD describe clinical samples, which represent only a small fraction of total population with the disorder⁸. Only 5% of PTSD in McFarlane's non-treatment seeking community sample of Australian fire fighters had previously sought mental health care⁵⁹. It is also difficult to get the accurate prevalence rates or clinical profile and risk factors from clinically described samples⁸. The sample of individuals seeking treatment for PTSD has been spoken of as being atypical of the total population with this illness⁸. Some remarks that can be put forth to explain the difference in gender distribution of PTSD in our study as compared to the studies from America and Canada reported so far are discussed as under.

Our sample is derived from a chronic conflict zone population, exposed to persistent and pervasive assaultive violent events. On the other hand the general population in the sample of above studies reflects the experience in communities not exposed to disaster conditions. Most of these studies report that in spite of lower trauma exposure prevalence in women they have a higher rate of PTSD, thereby suggesting that female gender is a risk factor for PTSD⁶. However, as recently pointed out by Breslau, research into the probability or 'conditional risk' of developing PTSD following exposure to a particular class of trauma can be of immense help in understanding some important issues pertaining to PTSD⁶⁰. A glance at the findings of the studies reported so far, at once reveals that a wide variance exists in prevalence of PTSD across events. Based on this, Breslau and others have very recently attributed PTSD gender differences to this particular fact that females are more likely than males to experience those types of traumas which are associated with a greater probability of PTSD. Rape and molestation in females, and combat exposure and witnessing trauma to others in males, are traumas most commonly associated with PTSD. Actually, sudden unexpected death of a loved one associated with a moderate probability of PTSD, is the most prevalent form of trauma experienced by 60% of sample from west⁵⁴ and largely contributes to the total volume of PTSD cases, as well as is the single most frequent PTSD precipitating event for both sexes⁶¹. So,

obviously, in absence of or with a very low incidence of traumas like combat, exposure to or experiencing mass traumatization, female PTSD in such community samples will get overrepresented due to violent type of trauma like rape and molestation (having a very high conditional risk of PTSD), which are almost limited to females. This is further supported by the observation that both genders are severely traumatized by sexual assault⁶¹. Rather when men experience such trauma an even higher percentage of them (65% as against 45.9% of females) develop PTSD⁶. Moreover in cases of natural disasters similar kind of experience of losses, and emotions by both sexes results in an equal prevalence in men and women (3.7% - 5.4%)⁶¹. Contrary to the above circumstances, the whole population in our study, irrespective of gender, has been experiencing a situation of mass traumatization for more than last 15 years, with 82.4% males and 79.68% females witnessing firing or explosions and 53.97% males and 32.42% females exposed to physical assaults, including being shot, stabbed, threatened, beaten severely, i.e. the category of trauma largely associated with PTSD⁴⁹. Subjects of a majority of samples of the western studies had predominantly experienced or witnessed a single trauma, that too mostly with a moderate conditional risk for PTSD, while as our population sample has been enduring ongoing extreme life experiences including multiple traumas of assaultive nature for more than a decade now. The Detroit area survey has revealed that previous exposure to an assaultive trauma increases the risk for PTSD ten fold on exposure to a subsequent trauma, compared to a non-assaultive trauma⁶². A sizeable number of cases in our sample have experienced 2-5 assaultive traumas and have been running a chronic course of PTSD for many years without any professional help or care. Even in the treatment seeking sample, as reported in another study in this publication, the average time interval between the onset and first mental health professional contact is more than 33 months (males = 47.7 months and females = 31.86 months)⁵⁷.

The adaptive mechanisms both at individual and community level under such circumstances are bound to fail, and vulnerabilities take the lead⁵⁸ due to mass trauma^{4-10,59}. Very recently, investigators have reported that trauma severity and environmental conditions after the trauma, rather than individual pre-trauma characteristics like gender, education, socio-economic status etc., strongly predict the development of PTSD^{55,58}.

Therefore, it is evident that for designing proper preventive and interventional strategies for individuals and communities exposed to mass trauma or disasters, a better understanding of factors that increase vulnerability or resilience among the exposed is indispensable⁶³. Unfortunately, adequate data on the natural course of PTSD during continuous trauma is not available⁵⁸. However, it is known that events of mass violence with malicious human intent have more grievous implications than technological or natural disasters^{64,58}.

Almost 74% of subjects in our study were with poor educational background (45.00% illiterate and 29.09% under graduates). Low educational attainment has been reported as a risk factor for development of PTSD^{55,65}.

Studies have shown that veterans with less pre-military educational achievement are at a higher risk for developing PTSD than others¹⁷. Similarly, Pittman found low scores on pre-military arithmetic aptitude test in veterans with chronic PTSD⁶⁶. Cognitive disadvantage also impairs coping that may hamper recovery following exposure to trauma^{67,68}. Jammu and Kashmir is one of the states with lower literacy rates (54.46%) than the average in India (65.38%)⁵⁰. The discrepancy is higher for women (42% compared to national average of 54%) than for men (66% against 76%)^{50,69}.

59.31% subjects of our study were not fully employed, putting them at a higher risk for trauma related disorders. Out of total 25.2% working force in Jammu & Kashmir, only 41.3% males and 7.3% females are gainfully engaged as main workers, while 63.4% (50.2% of males and 78% females) are non-working, resulting in poor socio-economic conditions⁵⁰. Unemployment and exposure to adverse work conditions, particularly high levels of perceived work stress, have been associated with persistence of PTSD symptoms⁷⁰.

Majority of subjects (60.47%) in our study were married. This finding agrees with an earlier hospital based study, reporting 56.7% of the sample as married^{71,57}. Kessler et al, found lifetime PTSD prevalence more in subjects who were married⁶. 64.22% of the subjects were from lower and middle class, who because of poorer education, lesser occupational adjustments, and lesser access to quality medical care are more at risk of incurring trauma and its aftermath^{55,65}.

Examining the relationship of cultures to trauma is necessary for a better understanding of vulnerability or resilience and recovery in traumatic situations. The exploration, of long term risk for survivors of any overwhelming trauma or disaster requires an evaluation of their unique socio-economic-cultural context that dynamically shapes their recovery and adaptation during the rest of the life⁷². Socio-cultural factors play a consequential role in determining how individuals cope with traumatizing experiences, in preparing the grounds on which social support and other positive uplifting events can be experienced. Contrary to the illusory belief of the west that human beings can control their destiny, leading to reduced religious indulgence, eastern religions like Islam and Hinduism teach that life is entirely determined by fate and one has to submit oneself to 'Allah's' or 'Eshwar's' (God's) will⁷³. After traumatic events, customs, rituals and places required to carry them out, if incorporated in rehabilitative programmes, can provide sufferers with a sense of identity and help them control their emotions, create self help opportunities, and link them more intimately to the social group which can facilitate re-establishing previously learned cultural rules and reinstate the members of community in the role functions in conformity with their places in the lifecycle⁷³. So, naturally the concept of the industrialized western world on psychosocial stresses, their sequelae, and coping methods can not be naturally subscribed to other countries of different cultures^{74,75}.

The disaster work in India, from the technological disaster of Bhopal, to various natural disasters including

Marathwada and Gujrat earthquakes, as well as our own observations (Table D) on the mass trauma and mental disorders have consistently shown that the majority of people use cognitive framework 'will of God', prayers and other religious activities as one of the first and foremost coping mechanisms to endure any tragedy, trauma, or disaster. This is almost an universal phenomenon in oriental societies, as revealed by a recent study from Chechnya, where more than 22.7% of internally displaced people have witnessed killing and 80% have seen people wounded, since the start of conflict. The majority of people (53.3%) in their second response to survey expressed praying as the most preferred option for dealing with problems and intense emotions, followed by talking to others (12.5%), keeping busy (9.4%) and aggression (15.6%)⁷⁴. Another recent study from Israel among three different types of population centers assessed for stress related symptomatology shows that the community with religiousness and strong socio-ideological cohesion, inspite of highest exposure to violent events, reflected the fewest of stress related responses and best coping amongst all cases studied⁷⁶.

Results of the study (January -March 2005) conducted during yoga based Tsunami relief programme at Andaman and Nicobar islands showed that prayers were the commonest (44% among the mainlanders and 41% among islanders) coping strategies utilized by survivors⁷⁷. A number of interesting co-relations were also observed between PTSD subjects and autonomic/respiratory variables in the study. Issues like anxiety management and lifestyle modifications are often helpful when treating patients with PTSD and modalities like yoga, which can more readily be incorporated into such a programme in

eastern cultures than the west, needs to be studied in our settings also. In addition, randomized controlled trials for evaluation of augmentation of treatment regimens for PTSD with multicomponent yoga treatment among Australian Vietnam veterans suffering from chronic PTSD, and testing specific breathing yoga techniques (Sudarshan kriya yoga) in American soldiers returning from Iraq and Afghanistan are underway^{78,79}. These studies have been undertaken on the basis of the reports, that these methods have relieved PTSD symptoms among people affected by mass disasters like war and natural calamities.

Research has shown that exposure to violence with armed conflict is a potent risk factor not only for post traumatic stress disorder but a range of psychiatric disorders and psychological problems⁸⁰. Therefore, mental health interventional strategies with a broad focus are needed to address the issue, especially at a place like Kashmir where natural disasters like snowstorm and earthquake have further traumatized the already terrorized population.

In Prospect

Our findings clearly indicate that PTSD is a highly prevalent disorder in the developing world as well, at least, in the areas of political unrest and disaster prone regions. Lifetime prevalence of 15.19% for this disabling disorder, in the 'Mass Trauma' situations, and the 18.51% in one year post disaster assessment, as revealed by our other study published elsewhere in this journal⁸¹ demand an early and aggressive out reach professional intervention to treat this disorder⁸² to reduce the enormous societal costs of PTSD. As of now, we have a long way to go to achieve this goal.

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SNOWSTORM DISASTER – LEARNING AND EXPERIENCE : FIRST THREE MONTHS

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Mental health care responses in the wake of disasters primarily strive for delivering both clinical and administrative services, in an effort to restore community equilibrium and to limit the occurrence and severity of adverse-impacts of disaster-related mental health problems. Disaster and post disaster period, also provide a unique opportunity of studying the post traumatic psychopathology and following its temporal course. With that rationale, this study was carried out on the survivors in Waltengo, a hamlet devastated by snowstorm in Feb. 2005. This study captured 3 months post disaster trends of symptomology. The symptoms observed under 4 classes: core traumatic, grief, somatic and anxiety, revealed that the reaction to disaster was a constellation of symptoms, defying classification into a particular disorder. Further, categorization of symptoms into psychiatric disorders was discouraged by the fact that many of the symptoms could be attributed to normal bereavement, which would decline with time. Grief was universal in the 1st week after disaster but lessened with passing time. Most symptoms abated with time, although avoidance, insomnia, phobias and certain somatic complaints increased with time. (JK-Practitioner2006:13;(Suppl1):S26-S28

Keywords : Disaster, psychopathology, grief, avoidance.

Introduction

Yearly, millions of people are affected by disasters including conflict, with the vast majority of affected persons living in resource poor countries outside the west. No adequate measures exist to assess the full human costs of disasters, especially the social and non pathological mental health effects¹. Quantitative research has shown that exposure to disaster increases the risk of depression, anxiety, somatic complaints with various risk factors such as female sex, prior psychiatric history, severity of disaster exposure, perceived lack of control during disaster and inadequate social support after disaster². Psychosocial aspects of disasters have received increasing attention in the past decades^{3,4}. However while obvious tendencies have emerged in literature disparities and contradiction are still predominant in reported results.

The psychological sequelae following major disasters often appears brief. Studies have shown that community wide disasters characterized by large scale loss of life, extensive property damages, economic disruptions and those related to human intent result in increased rates of psychiatric disorders^{5,14}. Evidence shows that mental health outcomes of disasters are determined by the characteristics of the disaster, the individual and the environment^{15,18}.

On Feb. 19, 2005, a snow storm hit the foot hills of pir-panjal in Kund area of Qazi Gund in south Kashmir-Waltango Nard. Vasak Nag and Nigeen Poora Nar were mainly effected, 164 people died, about 130 families were effected 498 people including women and children were evacuated to plains, 62 houses were destroyed completely, 11 families perished completely and many others were injured. The disaster evoked widespread public response.

We visited that area on 3rd day of disaster and kept on visiting the area on weekly for 4 months, we continue to

visit the disaster victims on monthly basis or earlier if the need arises.

Methods

Random interviewing with survived adults and adolescents started in first week of disaster and continued for more than 3 months. Interviews were conducted by trained psychiatrist with help from social workers trained in mental health. 142 people were interviewed out of which 80 were males and 62 females. Youngest interviewed was 12 years of age and eldest 56 year old female. Attrition of 39 people occurred in the study till the last interview conducted. The survivors were interviewed for socio demographic variables and presence or absence of traumatic symptoms, grief or depressive symptoms, somatic complaints and anxiety symptoms of generalized, panic and phobic type.

Results

Table 1: Sociodemographic profile

Age	37.12 (Mean)	
Sex	M	F
	80	62
Marital Status	Married	57
	Un Married	50
	Widow	22
	Widower	13
Educational Status	Illiterate	Literate
	92	50
Family Status	Joint	122
	Nuclear	20
Religion	Islam	142
Tribe	Gujar (Semi Nomads)	142

The demographic characteristics of the survivors are

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listed in table 1. The mean age of our sample was 37.12 years. There were 80 males and 62 females in our sample. Most of our sample was married, illiterate, belonged to joint families, followed Islam as religion and are part of large Gujjar semi nomadic community of Kashmir.

There was high prevalence of core trauma symptoms in first week following trauma which gradually started subsiding as we reached the 3rd month of disaster except for Avoidance (Table 2).

Grief was universal in the 1st week following disaster and started lessening as the weeks passed by. Survivor guilt or any other guilt feeling were minimal and suicidal ideation was present in 3% patients and increased to 6% by 3rd month (Table 3).

Somatic complaints are very common in post disaster period. Musculoskeletal pains and headache immediately after disaster and G.I. symptoms and genitourinary symptoms (most commonly Dhat syndrome in males and its equivalent Leucorrhoea in females) developed little later (Table 4).

Panic type of anxiety with somatic and non-somatic components is quiet common and decreases with time. Generalized type of anxiety even though present in about 20% patients in 1st week doubles by 1st month and plateaus by 3rd month. (Table 5).

Discussion

Disasters are not new phenomena, but only over the last 10-15 years have there been systematic attempts to investigate post traumatic reactions.. Unfortunately, disasters rarely provide much time for researchers to devise their research strategy, to develop their research instruments and to generate suitable control group. This study was done while being part of service delivery team which was the primary objective but as we know disaster psychiatry is nothing but learning and experiencing.

First week after disaster, greater than 90% of people demonstrated core posttraumatic symptoms, almost similar as found by Solomon et al 1993². It suggests that even if the symptoms may abate with time, acute stress symptom constellation is almost universal. Moreover even though intrusiveness and hyperarousal show considerable decline but avoidance was maintained. Almost similar results have been found by Mayou et al 1993³ and Shalev 1992⁴ in their studies even though the type of disasters have been different. In our case the survivors were rescued and relocated out and away from their socio-cultural milieu and basic amenities were provided in a way, that they created dependency rather than sense of reality and purpose in the tribe which in normal circumstances is hardworking and accustomed to face hardships with bravery and purpose. They were promised land and rehabilitation in plains. All of these factors resulting in reinforcement of avoidance behavior.

Depressive grief symptomatology was universally present in the survivors with no significant guilt feeling of any kind including survivor guilt which can be

explained on the basis of psychopathogenesis of guilt, where eastern religions Islam and Hinduism act as buffers from developing such feelings. Almost all grief, depressive symptoms started regressing by 3rd month with exception of sleep disturbances which were attributable to lack of friendly environment by most of survivors and lack of sleep hygiene. Suicidal ideation had doubled by 3rd month which was because of some people evolving into post disaster psychiatric morbidity.

TABLE 2 : CORE TRAUMATIC SYMPTOMS

Core Traumatic	1 st Week n = 142	1 st Month n = 142	3 rd Month n = 103
Rexperiencing	93% (132)	60% (89)	52% (53)
Hyper arousal	88% (125)	52% (74)	50% (51)
Avoidance	93% (132)	90% (128)	87% (90)

- Decimal fractions have been cancelled.
- +% ages sum for more than 100 because overlap is rule rather than exception

TABLE 3 : DEPRESSIVE OR GRIEF SYMPTOMS

Depressive symptoms	1 st Week	1 st Month	3 rd Month
Sadness	100% (142)	86% (89)	32% (33)
Anhedonia	100% (142)	50% (71)	17% (17)
Guilt	3% (4)	2% (3)	1% (1)
Sleep Disturbance	100% (142)	93% (132)	87% (90)
Appetite disturbance	93% (132)	50% (71)	12% (12)
Suicidal Ideation	3% (4)	0%	6% (6)

- Decimal fractions have been cancelled.
- +% ages sum for more than 100 because overlap is rule rather than exception

TABLE 4 : SOMATIC SYMPTOMS

SOMATIC SYMPTOMS	1 st Week n = 142	1 st Month n = 142	3 rd Month n = 103
Musculo skeletal Pain	90% (128)	30% (43)	32% (33)
Gastro Intestinal	20% (28)	23% (33)	40% (41)
Genito Urinary	3% (4)	7% (10)	14% (14)
Headache	70% (99)	73% (104)	50% (51)

- Decimal fractions have been cancelled.
- +% ages sum for more than 100 because overlap is rule rather than exception.

TABLE 5 : ANXIETY SYMPTOMS

ANXIETY SYMPTOMS	1- Week n = 142	1- Month n = 142	3- Month n = 103
Panic attacks	42% (60)	20% (28)	12% (12)
Generalized Worry and apprehension	20% (28)	40% (57)	40% (41)
Isolated Phobias	4% (6)	4% (6)	20% (20)

- Decimal fractions have been cancelled.
- +% ages sum for more than 100 because overlap is rule rather than exception.

Not only were traumatic and depressive symptoms very common in survivors, but so were somatically mediated complaints after catastrophic event. Young et al (2002) found almost similar results in his study. In fact some studies like by Wesley et al have found somatic complaints responsible more for loss of productivity in distressed population than anything else. In our study while Musculo skeletal pain and headaches lessened with time, the G.I. referred pains and other symptoms and genito-urinary symptoms increased with time.

Panic anxiety was very common initially with both somatic and psychological components and settled by 3- month while worry and apprehension increase by 1-

month and plateaued by 3- month. Isolated phobias also seem to increase by 3- month. Solomon (1989, 1993) found almost similar results.

Conclusions:

- 1) Traumatic, depressive, somatic & anxiety symptoms are very common after disaster. In fact most of the people react to trauma with polymorphism of symptom constellation rather than well defined symptomatology of disease and disorders, thus opening debate on concept of acute stress disorder.
- 2) Even though the symptoms abate and settle with time but still considerable population has symptoms and carry them on for which follow ups are necessary and needed & which we are doing.
- 3) At the end of 3- month we found many people continuing with avoidance, sleep disturbances, gastrointestinal and genitourinary somatic complaints, and apprehension and worry and developing isolated phobias.

Limitations:

- 1) The study has been carried by service delivery team and as secondary extension of their primary goal thus not standardized and based on clinical interview only.
- 2) The pre-disaster mental health situation of the area was not known.
- 3) The study is only a initial report and needs longitudinal follow up to make a statement.

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ONE-YEAR LONGITUDINAL STUDY OF SNOW STORM DISASTER SURVIVORS IN KASHMIR

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Disasters can be seen as a nature's instrument to test people: the survivors for their resilience and coping, the authorities for their preparedness and fleetness of action and the unaffected for their empathy. A natural disaster (snowstorm) struck and destroyed 'Waltengo Nard' a small hilly village in South Kashmir, on 19 Feb 2005, wiping out 24.77% of its population. While delivering services to the surviving, a controlled longitudinal cohort study was conducted collaterally to assess the psychological consequences of the disaster. A matched control was selected for comparison. GHQ-12 was used to screen subjects in both study and control groups, using a cutoff score of 6/7. 57.67% of study group scored positive on GHQ, as compared to 27.02% of control group. Further evaluation using DSM-IV based MINI neuropsychiatric interview showed a Psychiatric disorder in 34.39% of study population, compared to 14.05% in control group at the end of 1 year follow-up. PTSD formed the predominant diagnosis in the study group (18.5%) compared to control group (1.08%), followed by MDD (14.28% vs. 9.27%). Against the expected course there was no significant remission in psychiatric morbidity with time due to a number of factors, not the least important of which were the continued abandonment, poor social rehabilitation of the population and breakdown of existing social support system. (JK-Practitioner 2006; 13(Suppl.1); S29-S38)

Key words: Natural disaster, psychosocial distress, morbidity, PTSD, intervention.

Introduction

a) Description:

A natural disaster took over a small mountainous village in South Kashmir on 19th Feb. 2005, about a month after the devastating Indian Ocean Tsunami. Unprecedented during recent years, heavy snowfall for five consecutive days completely cut off Kashmir from the rest of world and all means of communication and transport were totally disrupted, with life coming to a freezing stand still. A small picturesque village "Waltengo Nard" at the foothills of Pir Panchal range of Himalayas about 90km from Srinagar, the summer capital of Kashmir, was struck by a snowstorm at about 12 in the noon. All the children, women and elders were indoors while healthy men were engaged outside clearing 10-12 feet high snow around their single or double room mud houses (Kothas), and a few double storeyed tin roofed houses. Suddenly with a deafening noise a dreadful snowstorm struck the area, burying everything, including uprooted trees, damaged houses, dead, injured and other survivors under a cover of 20 to 30 feet snow. The whole event went unnoticed for more than two days, though the neighboring natives living in the plains were alarmed by the observation that against an age-old routine, no person from Waltengo Nard village had visited the locality after the snowfall. On the next day with great hardships, a couple managed to reach the people in adjacent plain area and told them about the disaster. Thereafter, rescue work was initiated, initially by the neighboring villagers, and was joined by government and non-government organizations from third day onwards. 24.77% (n=164) population had perished. Since dead bodies could not be

moved out to graveyard, 5-10 bodies had to be buried together in mass graves in the same houses where some of the injured and surviving people were still trapped. The survivors were shifted to a tented colony created in the vicinity.

Over the past one year we have been regularly visiting the population and assessing their needs and post disaster psychological sequelae and providing all possible services as and when needed, to the best of our capabilities. A total absence of any kind of mental health care facility in the community in Kashmir made us to undertake this exercise, to satisfy our desire to provide continued services to the affected population. This experience also gave us a unique opportunity to assess psychosocial issues in disaster management as well as a chance to provide community consultation at the doorstep of each affected family. In the face of gigantic needs and demands, whatever little our humble effort might have contributed to ameliorate the distress of the suffering community, this self started innovative community outreach activity has been a real soul satisfying clinical experience and is worth sharing with the fraternity, more so in view of other devastating natural disasters of the year 2005 in the region, with which it closely shares most of its characteristics. The snow storm was named "Snow Tsunami" by the Air Chief of India and the other rescue agencies, although it could also with equal vehemence be described as a "Pilot Project" of the destruction unleashed by the earth quake of 8th October, 2005 which struck a similar population equidistant, to the north as against the snow storm site towards the south, from Srinagar.

The present observations are based on our self sponsored longitudinal first year post disaster service-cum-survey records of the mental health aspect of the entire surviving population of Waltengo.

b) Definition:

More than 40 different definitions of disaster exist in literature¹. The definition of disaster as severe disruption, ecological and psycho-social, which exceeds the coping

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CASE 1

Ms. J, 52 yr old female, a housewife, like other members of this socioeconomically low and marginalized community of disaster survivors, experienced psychological reactions in the immediate aftermath, which included feelings of 'shock' extreme fear, helplessness, multiple somatic complaints and sleep disturbances with occasional outbursts of anger and increased hostility. Unlike many others, whose complaints improved over time by reaching an understanding with, and acceptance of their experience, Ms. J's symptoms worsened in the setting of ruinous post disaster environment, as she struggled to survive. In the fourth month after disaster when seen at the outreach post, Ms. J presented with history of irritability, use of abusive language and loss of sleep. As the history unfolded, patient attributed her symptoms to the traumatic experiences of the disaster. More than three months back during the snowstorm, she along with her husband got trapped in a collapsed cowshed. When her 60 yr old husband after a great struggle managed to find his way out of the crumbled structure, she initially refused to accompany him with the argument, that in view of the whole village including her family having apparently perished, they should also die. While laboring out of the storm struck village through the devastated structures, uprooted trees and heavy snow she could feel her feet touching dead human body underneath. She vividly described how her husband and she managed to pull out an old man alive, who collapsed immediately afterwards. Finally, after an ordeal of many hours, when they reached the neighboring village she desperately looked for her family members and relatives who were scattered throughout the locality in different houses. To her dismay and shock out of a total number of nine family members only her 10yr old youngest son besides her old husband was alive. After this the patient had continued to be disturbed by frightening dreams of dead bodies scattered all around. Recollection of thoughts related to the deafening sounds at the time of disaster and the dead bodies touching her feet as well as palpitations and restlessness would recur. She would get markedly distressed and would try her utmost to avoid thoughts, feelings and conversation related to any aspect of the snowstorm. She would even try to avoid looking towards the mountains as they vividly reminded her of the whole sequence of traumatic events associated with the storm. Following continued inability to have a peaceful sleep, patient's irritability and outbursts of anger had markedly increased. She would often quarrel with those living in the neighboring tentments. Routine clouds or winds would frighten her extremely and she would feel haunted by an intense feeling of an impending catastrophe.

During the interview patient kept on saying repeatedly "I want to die; I want to go away; I had all hopes pinned on my children, whom I brought up in abject poverty; I was looking up to them as a source of comfort during my old age; I have lost my whole world", expressing extreme hopelessness and helplessness. A diagnosis of Post Traumatic Stress Disorder was made after discussing with the first author. Since the process of encouraging the traumatized community to first rely on their inherent strengths and their existing support network had been going on for quite some time now and keeping in view the ground reality as well as the patient's condition and vulnerability (2 years prior to disaster, her 21yr old son had died due to fall from a tree, only 3 days after his appointment for a Govt job), the treatment attempts through cognitive behavioral therapy and exposure therapy had to be shifted to pharmacological intervention (Mirtazepine 30mg) supplemented with task support and help of community volunteers. Spiritual cognitive restructuring/reinforcing and anxiety management was however also continued over the next three months, when patient improved considerably. Mirtazepine 30mg, which we had been providing the destitute patients, was continued and patient had shown considerable improvement in all of her symptoms, had resumed her household activities, and was ready to accompany us near to the disaster site. Subsequently, due to various adverse environmental factors she again worsened as is discussed in the case report of her 10yr old son below.

capacity of the affected community, given by WHO is the most widely used one². Much of the confusion in defining a disaster is due to the varied interests of the specialities dealing with the event, be it in medicine, sociology, political science or ecology². Catastrophic events being more frequent in the developing world often raise the threshold for an event to be considered a disaster². At the same time, unfortunately, there is limited research data on the psychosocial consequences of disasters from this region¹.

During the past two decades there has been considerable research on mental health aspects of disasters, in terms of service delivery, training of professionals and some systematic research in India¹, but to the best of our knowledge no controlled longitudinal epidemiological study of the entire disaster hit population has so far been reported from the South Asian region. The present study is an attempt to fill the gap in our understanding of the subject so as to develop appropriate means and skills for better disaster management in the region, especially for the economically disadvantaged and underprivileged communities, which constitutes the universe of this study.

Most of the subjects studied had lost their entire belongings including the livestock and other property items. In some instances, a single orphan or a widow or an elderly person was the only survivor of the family. In the first weeks following the disaster the first author constituted a team under his leadership comprising

mostly of the trainee psychiatrists and medical student volunteers, with the objective of providing psychosocial support and mental health services to the survivors. During the initial two visits in the first month after the disaster a pervasive indifference towards mental health needs by the Government, as well as of NGO relief service agencies working there was observed. Even, a statement was issued by a senior health services official, that except one case of mental disorder (a chronic schizophrenic), there were no psychiatric problems among the survivors. But, we knew that our presence would be of immense importance for future intervention. The initial three visits during the first six weeks although mainly utilized to create a working relationship with the local health providers and community leaders but spending some time with the bereaved families, listening to what they wanted to say without digging into their nightmarish experience, helped us a lot subsequently in establishing an effective therapeutic alliance and a positive cognitive restructuring.

Methodology**Study Design:**

In this cohort design study, the study group comprised of the whole surviving population of the disaster affected area (exposed) at the Waltengo Nard, Qazigund. The control group included the population of snow storm unaffected area (unexposed) about 30km away from the disaster site at 'Shalnard' Sagam, Kokernag, with identical

CASE 2

S, a 10yr old boy with a normal developmental history, student of 3rd standard with complaints of outbursts of anger associated with a disorganized behavior and aloofness was examined outside his tented shelter. The child did not communicate freely at the beginning, but within 15-20 minutes a good therapeutic rapport was established and he started giving details about his distress. The other source to collaborate the narration was his mother: As it was a cold winter day with 7-10 feet of snow already having accumulated outside, the boy was playing with his sister inside their mud house, 'Kotha', when with a big bang the whole structure collapsed and both got trapped inside with his sisters' body falling under rubble in the opposite direction. He was frightened, and unsuccessfully kept on struggling to reach his sister who was crying and repeatedly asking for water. Though he did succeed in pushing some snow with his feet towards his right hand and threw it towards his sister's mouth but she was already dead. The boy was lying near her dead body for two days, when he was finally rescued. Since then he had been getting recurrent nightmares, whose intensity and frequency had increased with every passing day. He felt as if something similar to the disaster was impending. He found it very difficult, rather impossible to divert his attention and thoughts away from the traumatic images and memories. The child had developed loss of interest in all activities including studies and would not like to see or play with other children; "I am waiting for my sister to come and will play only once she returns back". He had decreased appetite and had to be coaxed to take meals. There was a loss of sleep and repeated outbursts of anger accompanied by disorganized behavior. He was not able to concentrate on his studies and said "whenever I sit in the class and look up to the mountains surrounding my village, I can see my sister coming and calling me, her cries asking for water and my failed attempts (a stream of tears running down his cheeks), all this comes before my eyes as a real scene". After discussing with the first author a diagnosis of PTSD was made. Since the child failed to respond to psychological interventions we shifted to pharmacotherapeutic intervention and he was put on 7.5mg of Mirtazepine bedtime for first week and 15mg after that. The child was on 6-8 weekly follow-ups and was in complete remission for 6 months, when the symptoms returned suddenly, following the Killer Kashmir earthquake of Oct 2005. The child had a relapse of all the previous symptoms of re-experiencing, hyper arousal, and avoidance clusters, with a marked distress. Although no physical damage by earthquake was reported anywhere in South Kashmir (the site of snowstorm), but the child said "He could see mountains moving and thought that all of them would be buried under debris". With a combination of psychotherapy including reassurance, education to the child and his parents, some cognitive restructuring and pharmacotherapy the child again improved, but worsened with the first snowfall, as against all promises and plans by all concerned, they continued to live and shiver in open tents under the cover of snow. It was finally only after the child along with his parents moved to a permanent residential area that the psychosocial interventions and community consultations yielded the dividends, and the child is much better, studying and progressing well now.

topographical and socio-cultural background as the study group.

In entire international literature on disaster epidemiological studies, there are only a few studies of true cohort design available so far¹. The present study is first of its kind from this region, which in a truly cohort study design investigates mental health morbidity in the entire surviving population affected by a natural disaster in a community setting with an experimental design. Stringent criteria were adopted for selection of control group from a geographical area of comparable socio-economic background that had never experienced a snowstorm. In the analysis for matching the study group and control group some minor inter-group differences in per capita income, education and employment were observed. By using appropriate assessment tools the mental health morbidity was studied not only in terms of prevalence and pattern of diagnosable psychiatric disorders but also that of psychological ill health and distress. Besides other instruments and diagnostic tools, we used GHQ, which has been used as a screening instrument in disaster epidemiology internationally⁵, as well as in India³. We used 6/7 cut off score for GHQ, which has been documented as valid cutoff for the Indian population⁶.

Sample

All the surviving individuals of each household were enrolled as the study subjects, after the tentments/households were enumerated with the help of key persons at the relocated site. Similarly in the control population, households were included randomly and their inmates enrolled as study subjects. All the persons

above age of 8 years were included in the study. Those who refused to consent or could not be contacted were excluded.

Sample Size

All the tentments/households were included in the study, which numbered 72, with a total surviving population of 498 out of which only 378 subjects were included finally after applying exclusion criteria. In the control group, 33 households were included with the population of 231 individuals, out of which 185 were finally selected as study subjects.

Method

After proper consent, the subjects were briefed about the interview by the psychiatrists. This followed the initial interaction period of more than 3 visits with the whole community, when the lead author informed them about the study. A semi-structured interview schedule specifically prepared for the study was used to collect information on the socio-demographic variables in both groups and the extent of exposure to snow storm disaster in the study group.

General Health Questionnaire-12 short version (GHQ-12) was used for screening of subjects. All the subjects having scores of seven and above were investigated further to find out the pattern and extent of psychiatric morbidity. MINI screening instrument with high validity and reliability scores for DSM-IV based diagnostic categories were used to assess psychiatric morbidity in subjects who were screened positive on GHQ-12. MINI-Plus Neuro-psychiatric interview was used to assess adults while as MINI-Kid was used for children. The interviews were carried out by a trainee/trained psychiatrist.

Fieldwork Procedure**Informed Consent**

After an appraisal of the purpose of study to the key persons, their help and cooperation was taken for contacting the families. Informed consent was obtained from the head of each household and further from each subject included in the study.

In addition to routine visits to the study population, selected subjects were screened at regular intervals of 6-8 weeks with the above tools to update clinical information obtained earlier and also to diagnose any fresh psychiatric disorder patient. The interviews were carried out at three months, six months, nine months and twelve months post disaster.

Data Analysis

Prevalence of psychiatric disorders and patterns of GHQ score in both the groups were computed by using descriptive statistics and statistical test for the two proportions was used to obtain P-value.

Results

All the subjects in both the groups could be contacted as their mobility was almost confined to their

houses/tentments or at the most to the surrounding locality. They could easily be contacted on any visit. Out of 378 subjects in the study group, most of the men were illiterate, unskilled, Muslim adults, with labour, livestock breeding and minor agricultural activities like cropping corn as their main occupation. Females were mostly engaged in household activities besides helping the male in cattle grazing and agricultural activities. The only two educated males, one a graduate and the other a matriculate were serving as government teachers in the local school. Majority of the children were attending a school established in a tent in the locality.

The control group had almost similar socio-demographic profile as the study group except for a slight better literacy and economic status.

57.67% (n=218) subjects in the study group and 27.02% (n=50) in control group had positive GHQ-12 scores. Though all of them did not fulfill criteria for major psychiatric disorders, the high scores did point towards high prevalence of psychological distress, with symptoms like loss of concentration, sleep, appetite, irritability, loss control, depressive feelings etc. being very common

a) Populations Characteristics

Tale 1: Population characteristics of study and control groups

	No. of deaths	Survivors	Total Population
A) Study group	164 (24.77%)	498 (75.23%)	662
Male	41 (6.19%)	165 (33.13%)	206
Female	71 (10.72%)	143 (28.71%)	214
Children 52	(7.85%)	190 (38.15%)	242
B) Control group		231	231
Male		82 (35.49%)	82
Female		68 (29.43%)	68
Children		81 (35.06%)	81

b) Sample Characteristics

Table 2: Sample selection and attrition in target sample

	Study group	Control group
Total No. of sampling units(households)	72	33
No. of individuals	498	231
Total No. of individuals who could be included in the study (GHQ-12 administered)	378	185
No. of subjects who couldn't be included*	120	46
No. of subjects screened +ve on GHQ-12	218 (57.65%)	50 (27.02%)

*i) subjects below 8 yrs, ii) Could not be contacted, iii) Did not consent

c) GHQ Score

Table 3: GHQ scores of study group and control group

GHQ score	Study group (n=378)	Control group (n=185)
Positive	218 (57.67%)	50 (27.02%)
Negative	160 (42.33%)	135 (72.97%)
Total	378	185

P=0.000

d) Mental Health Morbidity

Table 4a: Psychiatric morbidity in study and control group at 1-year post disaster

Psychiatric disorder	Study group (n=378)	Control group (n=185)
Present	130 (n=34.39%)	26 (14.05%)
Absent	247 (65.60%)	156 (85.95%)
Total	378	185

P=0.000

e) Pattern of Psychiatric Disorder.

Table 4b: Pattern of psychiatric disorders in study sample at 1 year

	Study group (N=378)	Control group (n=185)	
MDD	54 (14.28%)	18 (9.72%)	P=0.107
PTSD	70 (18.51%)	02 (1.08%)	P=0.000
Pain disorder	04 (1.058%)	02 (1.08%)	P=0.980
Conversion	02 (0.52%)	04 (2.16%)	P=0.419

Over a period of One Year

Table 4c: Pattern of psychiatric morbidity over a period of 1 year

	Study Group				Control Group
Duration	3 months	6 months	9 months	1 year	1 year
Total No. of cases*	125	92	152	130	26
PTSD	75 (60%)	60 (65.2%)	105 (69.07%)	70 (53.85%)	02 (7.69%)
MDD	37 (29.6%)	25 (27.17%)	40 (26.31%)	54 (41.54%)	18 (69.23%)
Panic disorder	10 (8%)	04 (4.35%)	06 (3.95%)	04 (3.08%)	02 (7.69%)
Conversion disorder	03 (2.4%)	03 (3.26%)	01 (0.65%)	02 (1.53%)	04 (15.38%)

* varying number of cases at different visits was due to drop out/ remission/relapse/addition of new cases

As is evident from the table (4c) post traumatic stress disorder and major depressive disorder formed the major chunk of patients over the period of one year, in spite of the varying number of subjects (cases) due to dropout, remission, relapse and addition of new cases.

pattern of Psychiatric Morbidity in Study Sample.

Discussions

Besides immediate death and destruction, the short and long-term psychological consequences of disasters have been recognized for long⁷. As compared to man made disasters, natural disasters occur suddenly, usually without warning and kill a large number of people in defined or limited geographical area over a limited period of time. Irrespective of whether natural or man made, the collective social suffering resulting from disasters require a, 'supreme effort by individuals, communities and even entire societies to overcome'.⁸ Findings available so far regarding the mental health effects of disasters reveal that the majority of persons exposed do well, suffering only from mild transitory symptoms,⁹ but a detailed research about the sizeable proportion of survivors who develop psychiatric morbidity after disaster exposure is certainly warranted taking all the risk detriments and vulnerability into consideration. The emerging evidence that the loss to the individuals and the destruction of the community are inter-connected, [with worse outcome in persons belonging to the communities with severe destruction and suffering severe personal losses], additionally reinforces the need.¹⁰ Our study sample comprises an impoverished, marginalized, socially backward class of mountain dwellers, with a possibility of disproportionately adverse psychological impact. The observations made so far while dealing with their trauma are likely to guide us better in understanding the needs and appropriate methods of service delivery for Kashmir earth quake survivors who are a part of the same socio-cultural system, traumatized by a natural disaster of an other kind.

Whole of the village was destroyed by the snow storm with at least one death in each house-hold. Most of the survivors had a near relative dead in the disaster. The realization that 3-4 times higher disaster related deaths and about 40 times higher affected population rates in developing countries as compared to the developed world has led to recognition of the consequences of disasters as a serious health problem demanding not only provision of physical needs like shelter and food but psychological rehabilitation as well¹¹. Paucity of data available from the developing world on the psychological consequences of natural disasters following December 2004 Tsunami in the Indian ocean region led to unprecedented enthusiasm resulting in mobilization of a lot of resources and man power to study the mental health consequences of such disasters. Occurrence of repeated natural disasters during the past few months all over the globe including hurricanes 'Katrina' 'Rita', 'Williams' in U.S.A. and Brazil, floods in many other parts of world and the latest one in South Asian region as a killer earthquake of October 8, 2005, further highlights the need to study the short term and long term psychological sequelae of these disasters. The importance of psycho-social consequences need to be recognized at the earliest so as to develop appropriate policy with relevant plan of action and integrate it into the overall disaster management strategy to meet the mental health needs of the disaster effected population.⁷ As revealed by our study the GHQ scores are positive in 57.67% of study population compared to 27.02% of control sample ($P=0.000$), which indicates high

prevalence of psychological suffering and psychiatric morbidity in disaster survivors. The scores in the control group are also high when compared to other studies¹, which may be due to a chronic mass trauma situation already prevailing in Kashmir. 34.39% of study sample had a psychiatric disorder at the end of one year after disaster compared to 14.05% in control group ($P=0.000$). The prevalence of psychiatric disorders in the study group of our sample is much higher than any of the studies reported so far from India¹²⁻¹⁴. Various reasons may explain the high post disaster prevalence of psychiatric problems. Exposure to disaster leads to increased morbidity of varied nature and magnitude depending besides other factors, on spatial and temporal dimensions of the particular disaster^{15,16}. Though the pattern of high initial level of distress declining over time has been reported consistently by various longitudinal studies¹⁷, up to 75% of victims during the first few hours or days after the event have been reported to suffer from immediate post disaster reactions¹⁸. By 2 to 3 months there is usually a considerable decline with a progressive reduction over the first year¹⁹. As reported in our other study²⁰, during the initial post disaster period we also observed a very high rate of post disaster reactions. Grief was universal in the first week after disaster and lessened as the weeks passed by. A high prevalence of core trauma symptoms, somatic complaints, anxiety symptoms during the first few weeks also gradually decreased with the passage of time in the majority of cases. However, in a sizeable number of survivors not only did symptoms like suicidal ideations, avoidance symptoms, somatic complaints and anxiety symptoms continue, but also increased. A clear cut symptomatology of various psychiatric disorders clearly emerged after initial 3-4 months period.

In case of natural disasters like snow storm and earth quake, the threat and destruction is not spread homogenously in the geographical area but areas nearer to the disaster site get severely affected while as distant areas are affected only marginally²¹. We have also had similar observations during the past 4 months post disaster service and follow up of the worst ever Kashmir Killer earthquake of October 8, 2005 victims in the population of both the districts of Kupwara and Baramulla (unpublished). The dose response relationship between the severity of exposure and subsequent psychopathology results in varied rather than uniform prevalence rates²². The probability of development of posttraumatic stress disorder due to natural disaster has been reported to be about 23.9% in males and 19.7% in females²³. Our study reveals the prevalence of 18.51% PTSD in the study population compared to only 1.08% in control population ($P=0.000$). Major depressive disorder forms the next most common diagnostic entity of 14.28% in study group compared to only 9.72% in control population. These findings are in agreement with other reported studies from other parts of the world, which revealed PTSD to be the most prevalent disorder after exposure to a disaster²⁴⁻²⁷. Prevalence rates of PTSD ranging from 1.5% in population affected by Hurricane Andrew²⁸, to 67% in Armenian earthquake victims have been reported²⁹. Our study also reveals that out of the psychiatric patient group,

PTSD was the major diagnostic disorder with rates of 60%, 65.2%, 69.07% and 53.05% at 3 months, 6 months, 9 months and 1 year after disaster respectively in the study population. Similarly, major depressive disorder stood at 29.6%, 27.17%, 26.31% and 41.54% after a period of 3 months, 6 months, 9 months and 1 year post disaster, respectively. Norris reported that in developing countries, after exposure to natural disaster PTSD was found in 81%, MDD in 57%, generalized anxiety disorder (GAD) in 19% of the sample population³⁰. Our study also reveals almost uniform prevalence of PTSD and MDD over one year with slight increase in PTSD prevalence at 9 months and increase in the MDD prevalence at one year, which besides due to continued adverse socio-political conditions might be due to the harsh environmental conditions and lack of proper physical rehabilitative measures. Also the onset of winter and the earthquake precipitated the symptoms and led to a relapse in patients in remission and onset of delayed psychopathology in some. Besides, dose response relationship, many other vulnerability factors are important for interaction between disaster exposure, mediating factors and psychopathology³¹. Displacement of survivors to other areas, housing them in tentments, unemployment, inactivity and lack of recreational possibilities, favoring dependency in survivors and breakdown of traditional forms of social support are known to contribute significantly to mental morbidity³². One more reason for the persistence or increase in the prevalence of psycho-pathology may be due to breakdown in social support and family cohesion as due to lack of physical rehabilitation and harsh winter many families left the tentments and shifted to other places. It is well known that support from family and friends to disaster survivors leads to improved recovery³³, as psychological consequences of disasters especially in developing countries are known to be worst for subjects who are alone³⁴. Another reason for increased psychopathology may be the poor socio-economic and educational status of the survivors which is a risk factor for development of posttraumatic stress disorder³⁵ *per se*.

Self-strength has been reported to be one of the important predictors of psychological morbidity in post disaster situations³⁶. Due to a lack of employment, and initial dependence reinforcement by various relief and rescue agencies followed by complete abandonment, the dependent disaster population was exposed to changed realities of life, contributing to persistence or increase in psycho-pathology. This is contrary to the natural course of PTSD in other disaster populations where it was observed that after 3 months, 53% of patient population recovered and after a period of 1 year only 15-25% of patient population had diagnosable psychiatric morbidity³⁷. In study on Spitak earthquake survivors, Goenjian concluded that inability to rehabilitate the people by various agencies potentially correlates with high prevalence, marked severity and protracted duration of post traumatic stress disorder. Thus these modifiable, but unmodified, secondary stressors compromise the survivors capacity to adapt after disaster.³⁸ Similar was the case with the survivors of our study where, what the concerned promised in public, they could not give in

private.

Except for the initial 1-2 months after disaster, when as knee jerk response relief agencies surrounded them, the survivors' real immediate and future concerns were never secured. They were abandoned, given false hopes, made dependent, their innate coping weakened, social fabric disrupted and ultimately to their agony fragmented. Post disaster, living bereft and impoverished in itself has been no less traumatizing in view of unfulfilled promises, deplorable living conditions in small tents even in freezing temperatures, uncertainty about the safety of self and significant others and despite all this a sense of helplessness regarding the current happenings. Although funds were allocated for the relocation and rehabilitation of the survivors on government owned land, at a much safer and central place (Kansloo), the lower rung officials successfully impeded that process. Ultimately, most of them were relocated to an adjacent mountain, a topographically even more precarious site, where another disaster waits to befall them.

Claims of psychosocial rehabilitation, which are mouthed loudly by all concerned during the initial days of disaster, remain a distant dream for most of the disaster survivors. Rehabilitation plans have failed on all fronts. Social rehabilitation, which was claimed to be pursued for, has remained an elusive target. Despite a very high psychiatric morbidity, no definite plans have been conceived by the concerned authorities, and what remains to come in future for the survivors would hardly be a surprise.

Feb 19, 2005 Snowstorm Tragedy: Lessons for Oct. 8, 2005 Earthquake

The population living at Waltengo was already a socio topographically isolated and economically susceptible one. This from the outset increased their risk for poor mental health is in complete agreement with the observations made recently by Patel, et al.³⁹ This predisposition was brought to the fore by the snowstorm. tragedy and psychiatric morbidity rose to the very high levels, as revealed by our study. This scenario when considered in the light of the fact that much of the population in Kashmir lives under similar predispositions makes advance presence of a module for psychosocial rehabilitation mandatory. Its importance is further understood in the light of the October 8, 2005 earthquake.

Psychosocial care means not only emotional support, but effective help, suggestions and education besides many other things.⁴⁰ It is aimed at helping people with emotional support till their own coping take over successfully.

Post-disaster survivors are charged with a mix of disbelief, anger, grief and frustration, which they need to ventilate. Supportive listening without excessive probing into the event and associated feeling is extremely helpful to relieve survivors of their emotions. The mere presence of the empathetic listening can give a lot of relief to the survivor, provided they are allowed to speak comfortably. Educating the survivors about the effects of disaster on the mental health and differentiating normal from abnormal reactions, not only re-assures but also facilitates help seeking for severe reactions and early treatment for psychiatric disorders, if they emerge in future.

Disasters adversely affect and overwhelm the day-to-day stress coping mechanisms of survivors. Appropriate psychological support can remarkably enhance the capacity to regain the power to resolve problems. This can be achieved by helping survivors to get back their cognitive skills, which are of immense help in preventing future psychopathology and associated disability. In this regard, spiritual help from faith healers, clergy and respected elders of the community was of immense help in helping survivors to come to terms and live down the trauma. Spirituality is a strong tool to reinforce resilience among the survivors and cope with various difficulties through the course of trauma. Eastern religions teach inevitability of fate, which helps survivors to accept and live beyond trauma. Our other studies have revealed that resorting to religion happens to be the most often used coping method for dealing with the problems and intense emotions of trauma in our society⁴¹⁻⁴². Similar observations have been made by the recent studies in internally displaced people of Chechnya⁴¹. Its effectiveness in lowering stress related responses have also been proven by studies in Israel.⁴⁴ The beneficial effects of spiritual intervention have further been substantiated by the observations made in the other parts of the world. Following the recent hurricane, 'Katrina', it was observed that religious involvement was the mainstay for hope and peace.⁴⁵ Russell DSouza and Bruce Singh (2005) analyzed the mental health challenges while working within the disaster area of Srilanka following Tsunami. Their observations about the role of religion, spirituality and rituals in enhancing resilience, coping and understanding the meaning of the trauma in this perspective, strikingly matches with what we have been seeing among the trauma victims and snowstorm survivors in Kashmir⁴⁶. Spiritual involvement in the survivors of Waltengo also involved attachment to, and obedience of local clergy (*Imams*) and spiritual leaders (*Pir*). In many cases extreme avoidance and numbing of even desperate cases was significantly reduced, within a few sessions of advice and counseling by them. Integrating spiritual components as an integral part of the psychosocial intervention was rewarding in the management of many patients with severe post disaster psychopathology⁴⁷. Spiritual healers (*pirs*) and clergy (*imams*) have a central role in this process among socioeconomically deprived, and educationally backward people, who in the complete absence of any mental health care services hold the *pir* in high reverence⁴². Psychotherapeutic intervention through the medium of spirituality actually contains some essential elements of cognitive behavioral therapy including informal administration of elements of prolonged exposure, stress inoculation therapy and cognitive reframing. As pointed out above, there is globally an increasing recognition among mental health professionals that many patients consider spirituality as a primary human dimension. Spiritual beliefs and practices along with social, emotional, physical and cognitive aspects are getting included in the current concepts of coping strategies⁴⁷. Recommendations for incorporating spirituality as a core constituent of coping resources assessment or relapse prevention work for traumatized populations are getting

stronger day by day^{47,48}. For appropriate practice of formal models of cognitive behavioral therapy in non-western societies, their ground realities are of immense importance and stressed upon by international trauma experts also. Recently Foa (At the symposium "After the Tsunami: Mental health challenges to the community for today and tomorrow", held Feb 2-3, in Bangkok, Thailand) pointed out that "the methods (CBT) that have been used in the United States and Israel, and even in Japan and Korea, may need to be modified to meet the requirements of countries affected by the Asian Tsunami. This will entail the use of training methods to enable large number of mental health professionals to be trained together and enable the training of paraprofessionals"⁴⁹.

Various other interventions in the form of relaxation methods, guided imagery, systematic desensitization, cognitive reframing and sleep hygiene are quite helpful in alleviating the post disaster reactions including psychopathology. Supervised pharmacological intervention may however, be necessary in cases of severe post disaster reactions and mental disorders, which fail to respond satisfactorily to various psychotherapeutic interventions.

While planning and implementing psychotherapeutic interventions, cultural and individual factors must be considered. Culturally accepted relaxation and recreational methods like street plays and social congregations are quite helpful in dealing with stress of emotional reactions and help survivors to identify loss at a higher plane and as a common one. Similarly, vocational interest of different individuals in the society must be identified and these interests externalized by engaging them in productive activities so that mental energies are channelized in a healthy fashion. Lack of updated information and biased assumption based decisions lead not only to a wastage of time and resources but also result in investment in interventions that have detrimental consequences.⁴⁹

The results from the study on snow storm survivors and the various possible psychotherapeutic interventions serve important lessons to the policy makers, as they embark upon the challenges of social rehabilitation and psychotherapeutic interventions in October 8 earthquake survivors. The quake area of Kashmir being just 100 kilometers away from snowstorm site shares much with it in terms of topography, the people, their living and coping strategies, the administrative setup and the general inclination of NGO's.

In conclusion the study reveals that psychiatric morbidity in disasters victims is as prevalent and persistent here, as elsewhere in world, with PTSD forming the predominant diagnosis. There is need for further longitudinal studies to evaluate post disaster psychopathology, modes of intervention need to be evaluated and standardized according to local needs of the population. In addition the physical rehabilitation, it is extremely important to limit the further development of psychopathology.

*Grimfaced orphans with vacant eyes
widows who have bid joy adieu
Survivors of that fateful night
when death in guise of snow and ice
that solitary hamlet entombed...*

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SECTION - II

It is difficult not to empathize with those traumatized children who seem to have lost forever the carefree innocence that is their right. Their lives have been scarred by experiences so horrifying that they are unable to emerge from their despair without help.

The haunting demons of memory wreak frightful vengeance on their frail psyche. Trapped as they are in the whirlpool of relived experience; bewildered and frightened; they are agonizingly alone in their pain.

PAEDIATRIC PTSD: CLINICAL PRESENTATION, TRAUMATIC EVENTS AND SOCIO-DEMOGRAPHIC VARIABLES – EXPERIENCE FROM A CHRONIC CONFLICT SITUATION

Akash Yousuf Khan MBBS and Mushtaq A. Margoob MD

In the context of current turmoil prevalent worldwide, no age group is immune from exposure to trauma, and its consequences. The effects of trauma in terms of psychopathology are well understood in the case of adults, while as in the case of children they have only recently begun to be understood. In a turmoil situation, civilian casualties have been found to outnumber military casualties by 3:1, with a majority of these occurring in the developing world. About half of these casualties are likely to be children. Besides, conflict hampers their education and adversely impacts their social, moral, intellectual and emotional development. One such clinical manifestation is childhood PTSD. This study was conducted on 100 cases of PTSD in children, in the age range of 13-16 yrs, in Govt. Psychiatric Diseases Hospital, Srinagar. The most common traumatic event experienced was witnessing the killing of a close relative (49%), followed by witnessing the arrest and torture of a close relative (15%). The commonest symptoms were somatic complaints followed by conversion symptoms. Early recognition and treatment of childhood PTSD will go a long way in safeguarding a healthy childhood and preventing problems during adulthood.

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Keywords: Trauma, childhood PTSD, somatic symptoms, conversion symptoms

Introduction

New concepts emerge with the march of time. Over decades their origins have been challenged to be substantiated historically and scientifically with evidence obtained from human endeavor.

Millions of children are exposed to traumatic experiences each year. A significant number of these traumatized children develop a clinical syndrome with significant emotional, behavioral, cognitive, social and physical symptoms called Post Traumatic Stress Disorder (PTSD).¹

Although PTSD symptoms have been identified in adults for more than a century, recognition of this disorder in children only began to emerge recently. Descriptive accounts of children traumatized by the London blitz during World War II, of kidnapping and subsequent burial of children in their school bus, and of children exposed to a fatal school yard sniper attack were published by Anna Freud and Dorothy Burlingame; Lenore Terr; and Robert Pynoos; Kathleen Nader and Associates respectively.²

Traumatic events can have a profound and lasting impact on the emotional, cognitive, behavioral and physiological functioning of an individual.³ While described originally in combat veterans; a high percentage of rape victims, sexual abuse victims, survivors of natural or man made disasters and witnesses to violence also experience symptoms of PTSD.^{4,5,6,7} The largest group of victims of these traumatic events are children.

Research studies in recent years have confirmed that PTSD and its inherent co morbidity occurs not only in adult victims of traumatic life events but in children across the age spectrum.⁸

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Despite a high number of traumatized children, the clinical phenomenology, treatment and neurophysiological correlates of childhood PTSD remains under studied. The clinical phenomenology of trauma related neuropsychiatric sequelae are poorly characterized.^{8,10} The least characterized are very young children and children with multiple or chronic traumatic events.¹¹

Children's initial response to trauma is often characterized by physiological and behavioral arousal and when the trauma is ongoing the response may become complicated by dissociation.^{11,12}

A key complication in studying and treating trauma related neuropsychiatric problems in children is the complex and varied clinical presentation that may result following acute or chronic trauma.

Children form 40 percent of the total population in developing countries, where as they constitute only 25 percent of population in developed countries.¹³ The recognition of psychiatric problems in children by adults is important, as it is they who determine whether and where consultation and treatment will be sought.¹⁴

Despite the scope of this serious public health problem relatively little research has been dedicated to this area. Some initial steps towards understanding of childhood trauma, descriptive and clinical studies, have begun recently. The assessment of qualitative or quantitative states of such a phenomenon can significantly contribute to the understanding of trauma. To the best of our knowledge there are no published or detailed studies on stress related disorders available so far from India except a few national and international conference presentations.¹⁵⁻¹⁸ The paucity of literature on PTSD even among adults in the developing world has been time and again discussed in various national forums.¹⁹ Given the circumstances, prevalent in Kashmir, owing to a situation of chronic conflict such a study is warranted.

Methodology

This study was carried out in the Psychiatry

Department of Govt. Medical College, Srinagar at Psychiatric Diseases Hospital. This 100-bedded hospital is the sole psychiatric facility catering to the needs of the whole Kashmir valley, Leh, Kargil and some adjoining areas of Jammu Province.

A total of 100 patients (n=100) were studied. The sample comprised of 100 consecutive cases of posttraumatic stress disorder (PTSD), only one case from every individual family seeking treatment in the outpatient department of the Hospital from April 2003 onwards was taken up for study. Patients were diagnosed according to DSM IV laid down criteria. After taking detailed history and mental status examination patients were screened for any associated medical problems. Patients were selected on the basis of inclusion and exclusion criteria.

Inclusion Criteria

- 1) Age 3 years – 16 years irrespective of sex were included in the study.
- 2) Patients with common psychiatric disorders like depression, other anxiety disorders and substance use disorders were included in the study.

Exclusion Criteria

- i) Those who did not consent
- ii) Age less than 3 years
- iii) Age > 16 years
- iv) Those with co morbid psychiatric disorders like autistic and other psychotic disorders.
- v) Those with co morbid medical conditions including cerebral palsy, epilepsy, congenital genetic disorders, deafness, mutism.

Results

The clinical presentation, traumatic events and socio demographic profile of the cases in the study was as follows:-

1. CLINICAL PRESENTATION

SYMPTOM	%AGE
Somatic complaints (Headache, stomachache, palpitations, Breathlessness, decreased appetite Episodes of loss of consciousness/ conversion reactions	64
Irritability/ Out bursts of anger	50
Decreased School performance	32
Loss of interest and pleasure	22
Stammering	18
Enuresis	04
	03

2. TRAUMATIC EVENTS

	%AGE
Witnessing killing of close relative (Parents, Siblings, Uncle, Grandparents)	49
Witnessing arrest and torture of close relative	15
Witnessing night raids	11
Caught up in cross firing	14
Beaten up/Tortured	4
Hearing about killing of close relative	7

3. Socio-demographic Profile

a) Age	Percentage
Age in years	
<5	4
6–10	32
11-15	61
> 15	3
b) Sex	Percentage
Sex	
Females	60
Males	40
c) Residential Status	Percentage
Rural/ Urban	
Rural	67
Urban	33
d) Socioeconomic Status	Percentage
Socio-economic class	
Middle class	25
Lower class	75
e) Family Status	Percentage
Family	
Nuclear	33
Joint	60
Extended	7
f) Educational Status	Percentage
Education	
Students	80
Illiterates	17
Preschool	3

Discussion

A variety of circumstances call for assessment of pediatric PTSD, including referral to mental health clinics and identification of children at risk for developing PTSD after exposure to large-scale traumas such as natural disasters or witnessing violence in schools.²

The changing nature of the warfare over the last century has revealed an increasing trend of specifically targeting civilian population all over the world. Civilian casualties now have been observed to out number military casualties by a ratio of 3:1²⁰. Majority of such civilian casualties over recent years have been experienced in the course of conflicts within the developing world²¹, with approximately 50% of such casualties likely to be children²¹. Besides the direct experience of traumatic events such situations also affect children through the influence on family functioning. The fundamental routines, rhythms and meanings of the society within which a child is being socialized are also seriously affected by chronic conflict or war²².

In addition to disrupting their education the closure of schools as a result of conflict is increasingly being recognized to have generalized negative consequences on the social development of children. The social, moral,

Clinical Vignette

Nine year old girl, 4th among six siblings, born without any complications, from Poonch, Phari/Urdu speaking, student of 3rd grade in a Government run school, lower socio-economic background, Muslim was seen in the Outpatient Department in August 2003, the first contact of the child. The source of history was the child, her mother; the informant was reliable. After a wait of 1½ hours, the patient got her turn for evaluation. The child entered the room accompanied by her mother who was holding her hand. The child was properly dressed in normal attire and appeared scared and anxious. She was holding the hand, rather clinging to her mother throughout the psychiatric interview. After making the child comfortable, establishing some rapport within 10-15 minutes, psychiatric interview was started.

The child had been brought to the hospital with the complaints that she was getting recurrent episodes of loss of consciousness, chest pain and headache. As the history unfolded, the patient was apparently alright one and a half years back when she accompanied her father to his work place in a nearby locality where he was running a small tea shop to make his livelihood and support his four young children and his wife. On the same day suddenly cross firing took place in the vicinity of the shop. She was in the upper story of the shop. On listening to the gun shots she got terrified and came downstairs running to her father but to her dismay her world was lost as she saw her father on the ground in a pool of blood. She fainted as seeing the dreaded surroundings. She regained her consciousness in the police station where the official formalities were being completed. She was in a state of daze when the dead body was taken to the native village in a local bus, the little girl was sitting by the side of the dead body of her father besides few police cops. Once the dead body reached the village all the people in the locality assembled. On seeing her sisters and mother crying, she also started crying. As it was late hours of the night so burial was deferred till morning. 15 days after the incident patient started with episodes of loss of consciousness, fatigue, chest pain and headache and would verbalise nothing else. She was symptomatic and taken to a local hospital, after giving some medication and re-assurance, the patient was discharged. She was treated by many local doctors but without any help. After getting no relief of symptoms, the family was finally advised to take the patient to the tertiary care institute of Kashmir for a possibility of some cardiac ailment which might need immediate interventions. After all the investigations of the child by the cardiologists turned out to be normal, she was referred for psychiatric consultation. The child was brought to the second author (MAM) who has been working with the traumatized cases over past more than 15 years. As the mother of the child, put it on her third visit, "we were lucky that my child was seen here, this treatment brought wonders. The child was free of symptoms within six weeks and functioning well."

As per the history and the review of the available treatment records, during her initial period of illness she had developed characteristic PTSD symptoms including intrusive images, recurrent frightening dreams, when she would get up frightened with sweating, headache, palpitations, tremors; avoidance of the place where the incident had happened; avoidance of the graveyard where her father was buried as well as of the conversations related to the event. She had developed insomnia, hyper-vigilance, irritability.

A diagnosis of PTSD had been made. Treatment consisted of both pharmacotherapy and psychotherapy. Pharmacotherapy involved Tab. Sertaline 25 mg for first week with titration to 50 mgs after two weeks. Psychotherapy included psycho-education, anxiety management training and exposure. The family members were involved in all the steps of the treatment programme. The child was symptom free on regular medication with 6-10 weekly follow up. The medicines had to be continued as whenever she would stop the drugs, the symptoms would re-emerge affecting adversely the studies and over all functioning of the child. However in spite of the medication the girl had relapse of PTSD symptoms though not so severe as before immediately after the 8th October, 2005 devastating earthquake. With more frequent psycho-therapeutic and counseling sessions and increasing medicine to 75 mg/day facilitated early remission. The child at present is going well.

intellectual and emotional aspects of children face a cumulative adverse impact of various disrupting mechanisms in a society at war²³. Childhood is the foundation period upon which subsequent adaptation depends²⁴. Research outcome has consistently suggested that children can remain remarkably well adjusted as individuals even after experiencing the most adverse life circumstances²⁵.

Efficient identification of traumatized children at risk would allow clinicians to focus limited resources on these children who are most in need of clinical attention.²⁶ The present study assessing the clinical presentation, traumatic events and socio demographic variables of children and adolescents seeking treatment from the out-patient department of the sole Psychiatric Diseases hospital of chronic conflict affected Kashmir valley, is one of the first of its kind from an area witnessing political turmoil for more than a decade. This study needs to be seen in the background of the socio-cultural milieu of our place, which is in contrast to the west, from where most of the studies related to traumatic stress have been done.

1. Clinical Presentations

Maximum number of cases in the study had more than two presenting complaints. Majority (64%) of cases presented with the complaint of somatic complaints (i.e. Headache, stomachache, breathlessness, palpitations, loss

of appetite, and insomnia), followed by (50%) episodes of loss of consciousness/ conversion fits; (32%), irritability/outbursts of anger; (22%) decreased school performance, (18%) loss of interest and pleasure, (4%) with stammering and (3%) with enuresis. Findings of this study are in agreement with a study conducted by Farhood *et al.* (1993) from the Middle east during Lebanese war where they found considerable prevalence of somatic symptoms, such as headaches in both male and female children.²⁶ Similar findings were also reported by Baker (1990) in a study conducted on Palestinian children living in the West Bank where he concluded that psychosomatic and behavioral problems were predominant.²⁷ Abu Hein *et al.* (1993) found a high rate (25%) of conversion fits in Palestinian Children living in the Gaza strip and exposed to traumatic events during war.²⁸ These studies indicate that there may also be culturally determined variations in the presentation of anxiety or trauma related disorders, the findings of clinical presentation in our study may reflect culturally determined variations.

2. Traumatic Event

Of the six possible exposures, every child endorsed one traumatic event. The majority (49%) of the cases endorsed witnessing killing of a close relative (i.e. father, brother, uncle, grandfather) followed by (15%) witnessing arrest and torture of a close relative, (11%) witnessing

night raids, (14%) caught up in cross firing, (4%) beaten up / tortured and (7%) hearing about killing of a close relative.

3. Socio-demographic Profile

a) Age of cases

Majority (61%) of the cases were in the age group of 11 – 15 years. The reasons for this finding could be that the children in this age group have a higher chance of getting exposed to violence because they have to move out everyday to attend their schools which in most of the cases are located away from the place of residence. The other reasons for this finding may be that despite the continuing low intensity war like conflict situation except the early 1990's impact phase, the relative stability of the community enabled the children to continue their schooling. The children suffering from PTSD may have been detected in schools because of their deteriorating school performance and behavioral changes. The findings of our study are in agreement with an earlier study by Margoob, which reported that 66.67% of children suffering from PTSD belonged to the age group of 12 – 16 years¹⁴.

b) Sex

Majority (60%) of cases in our sample comprised of females and (40%) were males. The findings are in agreement with findings of Kessler *et al.*²⁹ and Breslau, *et al.*³⁰ who also observed that females have 2.32 – 2.49 times more likelihood of developing PTSD than men. The proportion of females in our study differs from previous studies conducted by Margoob¹⁴ and Zaffar, *et al.*³¹ In the study conducted by Margoob, the percentage of female patients suffering from PTSD was 66.67 %, the reasons for this finding could be that the study did not look specifically for PTSD but for the overall pattern of child psychiatric disorders where presence of cases of PTSD was a significant finding. This could have resulted in inadequate sample size of PTSD cases. In the study conducted by Zaffar *et al.*, the percentage of female patients was 53%. The difference in findings could be because of the fact that only chronic cases of PTSD were taken as sample and sample size was 167 cases in the study carried out by Zaffar *et al.*

c) Residential Status

Majority (67%) of the cases in our study were from rural area and (33%) were from urban areas. The reasons for this difference could be that violent incidents take place quite frequently in rural areas and besides this majority (74.9%) of the population in our state is from rural background³². The other reason could be that the majority of patients who seek outpatient treatment facilities at the sole psychiatric disease hospital are from the rural areas. The finding of this study is in agreement

with an earlier study by Margoob, that reported 66.67% of the patients belonged to rural areas and 33.33% belonged to urban areas¹⁴.

d) Socio-economic Status

Majority (75%) of cases in our study belonged to lower class followed by (25%) from middle class and there was no patient from the upper class. The reasons for this finding could be that the majority of population seeking outpatient facilities of the hospital is from lower class as the consultation services are free of cost and there is another incentive in the form of free medicines from hospital supply. The total absence of any case from upper class does not mean that children and adolescents from upper class are immune to PTSD but the reason for such a finding could be that parents of children from upper class prefer to get their children treated by private practicing psychiatrists rather than risking them get the association of stigma related to psychiatric diseases hospital. The findings of this study are in agreement with another study from our hospital where it was reported that majority of cases were from lower socio-economic background¹¹.

e) Family Status

Majority (60%) of cases in our study belonged to joint families followed by 33 % belonging to nuclear families and 7 % belonging to extended families. The reasons for this finding could be that majority of our sample was from rural areas, where the joint family is still the preferred family system. The findings are in agreement with our earlier study from this hospital where 59% of cases belonged to joint families.¹¹

f) Education

Majority (80 percent) of cases in our study were students followed by (17 %) illiterates and 3% preschool children. The reasons for this finding could be that the maximum numbers of cases in our study were in the school going age. The other reasons for this finding could be that there is free education up to 8th class in government run schools, as most of our cases were from lower and middle class families, they were studying in these government run schools.

Studies carried out during the past decade have revealed that like trauma exposed adults; children can develop PTSD following exposure to traumatic events³³. When assessed with the help of standardized methods 30-60% of child survivors of specific disasters are reported to develop PTSD^{33,34}.

It is being increasingly recognized that as a disabling disorder PTSD is prevalent in both developed and developing world child populations²⁸. An urgent need to develop socio culturally appropriate and clinically effective interventions in this age group, based on rigorous controlled trials, is warranted.

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PTSD SYMPTOMS AMONG CHILDREN AND ADOLESCENTS AS A RESULT OF MASS TRAUMA IN SOUTH ASIAN REGION: EXPERIENCE FROM KASHMIR

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Exposure to trauma has a lasting impact on the emotional, behavioural and other aspects of personality in children. To assess these effects, a study was carried out on 56 children, diagnosed with PTSD using DSM-IV guidelines, at Govt. Psychiatric Disease Hospital, Srinagar. The children were in the age range of 3-16 yrs. The observations were made under four categories, Trauma, Re-experiencing, Avoidance and Hyperarousal. The most common mode of exposure to trauma was by witnessing it (75%). Commonest form of re-experiencing the event was through distressing dreams/nightmares (85.71%). Avoidance of people and places related to the original event was the major avoidance mechanism (85.17%). Most patients had an acute onset of PTSD (92.85%), while most of the cases were diagnosed in the chronic stage (71.43%), indicating a delay in diagnosis and treatment
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Keywords : Trauma, childhood PTSD, reexperiencing, avoidance, hyperarousal, chronic PTSD.

Adverse early life experiences, especially traumatic events can have a profound and lasting impact on the emotional, cognitive, behavioral and physiological functions of an individual for the whole of his life. Millions of children are exposed to traumatic experiences even in developed countries like USA which increases the risk of developing PTSD in event of a traumatic experience in adult life¹ each year². The triad of symptoms following a traumatic experience has been termed as Post-Traumatic Stress Disorder (PTSD).³ Approximately, 20 percent of individuals exposed to a significant traumatic event will develop (PTSD)⁴ and children may be at an even higher risk.⁵

Posttraumatic stress Disorder (PTSD) codified in DSM III in 1980 has been a subject of debate regarding its nature and origin. On the one hand there are those who say that it is a timeless disorder, which has only recently been recognized, on the other are those who say that as a culturally determined diagnosis it reflects contemporary interpretations of trauma and memory.⁶

Mental health professionals have recently begun to examine the prevalence of trauma exposure among children and the effects of such exposure.⁸⁻¹⁰ This research reveals that traumatic experiences are common among the youth.¹¹ Although there are no epidemiological studies on the incidence of post-traumatic stress disorder (PTSD) in youth, a number of studies have converged to suggest that traumatic events can lead to severe and debilitating PTSD in them with rates of PTSD varying greatly across studies.¹¹

The high prevalence of PTSD in children traumatized by exposure to community violence or war trauma is well established. Macksoud and Abram (1996) found PTSD rates of 43 percent in Lebanese children upto 10 years after

exposure to war trauma.¹² Among displaced Kurdish children in Iraq following the 1st Gulf War all had PTSD symptom reactions and 20 percent had PTSD.¹³ Servus-Schreiber, et al. (1998) reported a 30 percent rate of PTSD in Tibetan refugee children in India.¹⁴

Historically childhood studies of trauma expanded from clinical case reports to systematic comparisons using a 'dose of exposure' design with inclusions of contemporaneous, comparison and control groups.^{15,16}

Over the past decades, there have been advances in the characterization and investigations of post-traumatic stress studies in children and adolescents experiencing catastrophes. In 1987, for the first time, the diagnostic criteria for posttraumatic stress disorder (PTSD) included specific childhood presentations.¹⁷

DSM IV took a step forward with the introduction of developmental modifications to criterion A (experience of trauma) and the symptom cluster B criteria (Re-experience). Although symptom clusters C (Avoidance and numbing) and D (Hyper arousal) have not had developmental modifications, each of these symptom cluster criteria must be met before diagnosis is assigned in children and adolescents.¹⁸ There is little empirical evidence that the tripartite clustering of symptoms that depict adult PTSD approximately characterize paediatric PTSD. To our knowledge so far just one study has examined the clinical importance of the occurrence of symptom clusters in a paediatric population.¹⁹

A variety of circumstances call for assessment of paediatric PTSD, including referral to mental health clinics and identification of children at risk for developing PTSD after exposure to large-scale trauma such as natural disasters or witnessing violence.¹⁹

Efficient identification of traumatized children at risk would allow clinicians to focus limited resources on these children who are most in the need of clinical attention.¹⁹

As recently pointed out by Shalev et al.²⁰ huge data is available on the psychological consequences of trauma experienced by individuals, but there are few studies on the acute and long term facts of mass trauma on victimized communities. The greatest risk for PTSD among persons having experienced mass trauma are those with significant losses or those without adequate psychological and social

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Kashmir currently is among the most vulnerable places for various psychological sequelae not only due to the recent natural disasters (snowstorm Feb. and earthquake oct. 2005), but more so because of long standing conflict of more than 15 years.

The main aim of the present exercise however is to look for the problems like the one mentioned above among the children and adolescents who have been spending their childhood days in a perpetual situation of mass trauma for more than a decade.

Method

This study was carried out on the PTSD patients seeking treatment at the Psychiatric Diseases Hospital, Srinagar of Kashmir valley. This hospital being the sole psychiatric disease hospital gets patients from all parts of the Valley. Therefore, the outpatient population does reflect to a satisfactory level the community scenario.

The sample comprised of 56 consecutive cases of post-traumatic stress disorder (PTSD). Only one case from each individual family seeking treatment from April 2003 onwards was taken up for study. Patients were diagnosed according to DSM IV laid down criteria. After detailed history and mental status examination, patients were screened for any associated medical problems.

Inclusion criteria

- 1) Age 3 years – 16 years irrespective of sex were included in the study.
- 2) Patients with common comorbid psychiatric disorders like depression, anxiety disorders and substance use disorders were included in the study.

Exclusions criteria

- i) Those who did not consent
- ii) Age less than 3 years
- iii) Age > than 16 years
- iv) Those with comorbid psychiatric disorders like autistic and other psychotic disorders.
- v) Those with comorbid medical conditions including cerebral palsy, epilepsy, congenital genetic disorders, deafness and mutism.

Results

The nature of traumatic experience and frequency of symptom cluster was as follows:

	(No)	(%)
A. Trauma		
Witnessed	(42)	75%
Experienced	(10)	17.85%
Confronted	(04)	7.14%
B. Re-experiencing		
Distressing Dreams/Nightmares	(48)	85.71%
Distressing recollections	(32)	57.14%
Psychological re-activity	(28)	50%
Feeling of Reoccurrence	(04)	7.15%
C. Avoidance		
Avoidance of people, places and related activity	(48)	85.17%

Avoid thoughts and conversations	(24)	42.85%
Diminished interest	(32)	57.14%
Inability to recall an important aspect of trauma	(06)	10.71%
Sense of foreshortened future	(02)	3.59%

D. Hyperarousal

Sleep problems	(48)	85.17%
Hyper-vigilance	(38)	67.85%
Irritability/outbursts of anger	(32)	57.14%
Exaggerated startle	(20)	35.71%
Difficulty concentrating	(14)	25%

E. Onset

Acute	(52)	92.85%
Delayed	(04)	7.15%

F. Longitudinal course (as on first contact)

Acute PTSD	(16)	28.57%
Chronic PTSD	(40)	71.43%

Discussion

The study of traumatic stress confronts clinicians and researchers alike with a need to approach their subjects with a blend of objective science and awareness of socio-political contexts in which the trauma is embedded.²² The present study assessing the PTSD cluster symptom profile of children and adolescents seeking treatment for PTSD, in turmoil affected Kashmir valley, is one of the first kind from South Asian region witnessing chronic conflict situation of more than a decade.

Millions of children are exposed to traumatic events each year. Over thirty percent of these traumatized children have been reported to develop post-traumatic stress disorder.²³ Despite high number of traumatized children, the clinical phenomenology, treatment and neurophysiological correlates of childhood PTSD remains under studied. The clinical phenomenology of trauma related neuropsychiatric sequelae are poorly characterised^{24,25}. The least characterized are very young children and children with multiple or chronic traumatic events²³. Children's initial response to trauma is often characterized by physiological and behavioral changes and when the trauma is ongoing the response becomes complicated by dissociation.^{26,27}

Trauma not only overwhelms the individual's psychological and biological coping mechanisms but also leads to drastic changes in the perceptions of the whole socio-cultural systems which may never be the same again. Death is a new experience for most of the children who might not know what to expect after the loss of a family member or friend. They may be confused or get frightened by the reactions of the other family members, more so in the event of a traumatic death.²⁸ In such a traumatic context the children can present with complicated grief and bereavement which can hamper the diagnosis of PTSD especially among younger children who instead of displaying the core symptom cluster of adult PTSD may mask these underlying symptoms of hyperactivity, distractibility and increased impulsivity that are likely to get confused with ADHD thereby worsening the substantial challenges that PTSD poses to healthy physical, cognitive and emotional development of

children.²⁹

This study also needs to be seen in the background of the socio-cultural milieu of our place which is quite different from the west, where from most studies related to traumatic stress have been derived so far.

Cluster symptomatology

a. Trauma

Majority (75%) of cases in our study had witnessed a traumatic event followed by experiencing (17.85%) and confronting (7.14%). The findings of our study are in agreement with the earlier study on PTSD in children and adolescents living in orphanages in Kashmir, conducted by Margoob et al, which reported that 77% of the sample had witnessed violent traumatic event.³⁰ The findings of this study differ from one conducted by Zaffar et al. which was based on treatment seeking adult PTSD population and found that (50%) of cases had experienced traumatic event and only 35% had witnessed a traumatic event.³¹ The reasons for this could be difference in the age group of sample.

b. Re-experiencing

Majority (85.71%) of patients in the study had a re-experiencing of traumatic event in the form of disturbing dreams/nightmares (57.41%) and distressing recollections. The findings of our study differ from that of Cuffe et al. (1998), who reported distressing recollections as the most re-experiencing symptom.³² The reasons for the difference could be that the age group of patients in the study conducted by Cuffe et al. was 16-22 years while as the age group of our patients was 3-16 years.

c. Avoidance

Majority (85.71%) of the cases in our study had avoidance in the form of avoidance of people, places and activities followed by avoidance of thoughts and

conversations (42.85%). The findings of our study are in agreement with findings of study conducted by Cuffe et al. (1998), that efforts to avoid thoughts and feelings and efforts to avoid activities that facilitate recollections of trauma are the commonest avoidance symptoms. The findings of our study differ from that of Carrion et al (2002), who reported that avoidance of thoughts, feelings and conversations, were present in the majority (83.1%) followed by avoidance of places and people (59.3%).¹⁸ The reasons for this difference could be due to the difference in sample size, cluster symptoms and traumatic events. In the study by Carrion et al., 59 children meeting criteria for only one or two symptom clusters were also included in the study, in contrast to the sample of 156 children meeting criteria for all the three symptom clusters.

d. Hyper arousal

Majority (85.17%) of the cases in our study had sleep problems/insomnia followed by hyper vigilance (67.85%). The findings of this study are different from those of Carrion et al, (1998), which concluded that the commonest hyper arousal symptom was difficulty concentrating (65.44%) followed by sleep problems (59.3%). The reasons for this difference could be, that in our study the commonest re-experiencing symptom was distressing dreams/nightmares, which could explain, the increased cases of sleep problems/insomnia.

e. Onset/Longitudinal course

Majority (92.85%) of the cases in our study had an acute onset and (7.15%) had delayed onset. Majority of the cases (71.43%) were running a chronic course. The findings of our study are in agreement with study conducted by Margoob et al. where they concluded that majority of the cases had an acute onset of symptoms but were running a chronic course.

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THE CHILDREN LIVING IN ORPHANAGES IN KASHMIR: AN EXPLORATION OF THEIR NURTURE, NATURE AND NEEDS

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One of the only few options available for rehabilitation of orphans in eastern societies is orphanage rearing. A lot many factors, however, go into determining the level of cognitive, behavioral and emotional development of children in these institutions. A study was conducted on four major orphanages located in Srinagar city, to assess the existing differences in available facilities and their impact on the psychological adjustment of these children. The UCLA loneliness scale was used to assess levels of loneliness, an indicator of psychological distress, among the resident children. High scores were associated with adverse living conditions, like poor residential setup, rigid timetables, poor recreation facilities, poor nutrition and lack of modern educational facilities. These facts could prove seminal in planning for better rehabilitation modules for orphans, especially in the wake of their exponential increase in the chronic conflict and disaster affected regions.

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Keywords : Orphans in conflict areas, orphanages.

INTRODUCTION :

The practice of placing deprived children having minimum or no emotional and material resources, in large residential institutions like orphanages, destitute homes and charity educational institutions has since long been prevailing in socio-economically poor Asian countries. As a result of chronic conflict in many areas and the recent natural disaster including Tsunami and Kashmir earthquake in these regions, there has been an exponential increase in the number of orphans in all these disaster areas.

An orphanage is an institution dedicated to the care and up bringing of children who have lost their parent(s). Historically, such institutions were quite prevalent in western societies in the past. An upsurge in such institutions was observed during mid 1700's, mid 1800's and immediately post World War I¹. Despite the rising role of foster care for orphans in western society, orphanages continue to play a key role in the war torn third world countries, where their number is ever increasing, they have no means of survival, and foster care is culturally unacceptable²⁻⁶.

More than 50 years of research provides convincing evidence that the type of institutional care provided in western countries had a detrimental effect on cognition, behavioral, emotional and social development of young children^{7,9}. But in some poverty stricken countries it has been observed that the children in orphanages had better chances of cognitive development, when the children were encouraged to participate along with the staff in the decisions that influenced them in the institution. It is possible that when managerial skills are fuelled by education and understanding, orphanages can provide a humane social environment one that offers of a close and stable relationship between members¹⁰.

With regards to growing up in an orphanage, recent studies from Africa suggest that the children who grow

into adults in orphanages have remarkably good long-term life adaptations^{11,12}. Most recent studies on children in conflict zones have stressed that children can survive traumatic situations if they feel cared for. Psychological well being in large measures depend upon the mergence of social support system and social network around vulnerable children¹³. Countries that spend less on community health and social services are more likely to have a higher proportion of institutionalized children¹⁴.

Losing a parent exposes a child to long-term psychological disturbances, which is greater if the parent is of the same sex¹⁵. It has been suggested that it is not always the traumatic event as such but disruption and chronic pressure surrounding the traumatic event that are responsible for adverse long-term outcomes^{11,16} and¹⁷. Giving such children warm and good relations can ameliorate their psychological disturbances¹⁸⁻²¹. It is known that profound loss in childhood is a precipitant for symptoms of disabling psychiatric disorder, like PTSD²². To prevent these sequelae, such children need to receive adequate care from caregivers¹¹.

Our study is an attempt to examine some of the social and cultural circumstances of orphanages in Kashmir. As a result of long-term chronic violence, the number of orphans have increased markedly from last 15 years. According to UNICEF there are over 100,000 orphans in Kashmir²³. There are only 20 orphanages presently, that take care of less than 1000 orphans. The annual expenditure of government for orphan care is about \$ 4 per orphan per year, as reported by UNICEF²³. Most common problems faced by orphans include loss of home, high dropout rate from school, lack of health care and problems with immunization, social downfall, child labour and drug abuse²⁴. Relationship between the psychological health and types of institutional care have been investigated but not in our part of the world^{25-30, 11&22}.

MATERIALS AND METHODS:

In our study we surveyed four orphanages for comparison, located in Srinagar city, identified in our report as orphanages A, B, C and D. All orphanages were run by NGO's. The age of orphans we encountered in these orphanages were from 6 to 16 years.

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Orphanage A: Accommodates 200 male orphans, in a three storeyed building owned by an NGO, running the orphanage and is located in the main city. A group of 10 children of roughly the same age sleep and live together in each room measuring approx. 16 x 18 feet. The children examined in this orphanage were domicile from 1 year to 6 years, with a mean duration of 3.5 years. The children attend a private school, located in same area, which is run by the same organization. This orphanage sports many indoor and outdoor games, with other recreational facilities like Television. They have their own playground on approximately 2 kanals of land (1/4th of an acre). The usual day is spent getting up early in morning, praying, self-studies, going to school and then evening time recreations.

Orphanage B: Accommodates 50 children and is located in the main city. A group of 4 children in 10x12 feet room, and that of 10 children in 15x10 feet room live and sleep together. The children are domicile from 1 to 6 years, with a mean duration of 3.5yrs. The children attend a nearby public school where they mix freely with non-orphan (regular) students. The usual day spent is similar to orphanage A. They also have their own playground, on approximately one kanal of land.

Orphanage C: Is one of the oldest one, established in 1973, located in old city, accommodating 49 orphans in 5 rooms, with 3 separate single storeyed blocks. Each room measures 14x16feet and accommodates ten children. The children attend different private schools in the vicinity. The time of stay of these children ranges from 1 to 10 years, i.e. mean duration of 5 years.

Orphanage D: Also located in old city, accommodates 35 children in an old building. The building, with 3 rooms has been taken on rent. (The wall of one room has been damaged due to Oct 8 earthquake). Staff members and teachers are from different parts of country, speaking different languages, mostly Urdu. The children receive extensive religious teaching in Arabic only. No modern educational and social activities are available to the children living in this orphanage. The recreational facilities are poor, nor does the orphanage have any playground of its own.

In our study we interviewed a group of 30 children from each orphanage using a semi structured questionnaire which also incorporated items from the ULCA Loneliness Scale (which has 20 brief questions, to which children answered on four point scale) to get a indication of psychological adjustment of these children³¹. Total scores range from 20 (not lonely) to 80 (severely lonely). The mean score for general population was 40.

RESULTS:

Table 1: Loneliness scores among children in the four orphanages in Srinagar city

Orphanage	No. Of Children Examined (boys)	Mean score of loneliness scale
A	30	47.07
B	30	41.2
C	30	49.6
D	30	56.5

DISCUSSION:

Scores on the loneliness scale have been found to predict a wide variety of mental and physical outcomes³¹. Loneliness has been considered as a psychological problem, but research conducted in the past few years has suggested a relation between loneliness and health³². In our study the combined score of sample children in orphanages is greater than average score of 40, correlating well with psychological morbidity in these children. The observations are consistent with studies that consider orphanage children vulnerable to medical and psychosocial hazards of institutional care³³. The observation could be explained by the fact that most of the orphanage children have experienced many traumatic incidents³⁴, yet they do not have an access to mental health services. The results are also consistent with other studies that consider children of orphanages more susceptible to long-term psychological and social effects than children in foster care³⁵. Same results were seen in two-year follow-up of orphans in orphanages in Iraqi Kurdistan, compared with foster care, which showed improvement of boys' activity scores in foster care and deterioration of girls' competence in orphanages³⁷. As has already been discussed above, the number of orphans is increasing in this part of the world. With foster care and adoption being impracticable, orphanages are the only viable means of survival for such destitute children³⁶. Further in our study the results of orphanage B, which has relatively better facilities, the children scored lowest on the loneliness scale, which is almost the same as the mean of the general population. It is evident from these observations that if the institutions have a quality residential setup, care giving, living, food and modern education, they are more effective in meeting the emotional needs of orphans. This is supported by a few studies, which suggest that long-term adverse effects on orphans can be lessened by warm personal relationship¹⁸⁻²¹.

The high score of orphanage D may be explained on the basis of poor residential setup (overcrowding)³⁶, rigid timetables, poor recreational facilities, poor nutrition, and lack of modern educational facility and approach, which leads to a feeling of insecure future. Further, lack of experience among teachers, and culture and language disparities between the children and teachers leads to impaired communication of the concerns and needs³⁷. The above observations are consistent with Fuhmann and Munchel (1995), who found a number of problems related to the staffing of institutional settings including limited training, lack of appropriate supervision, few opportunities for professional advancements and the need for staff to better understand the needs of children and appropriate discipline techniques³⁸. The negative life events carrying long term threat have been associated with a wide range of psychiatric disorders³⁹. So, accordingly it may be expected that poor standards of living and poor nutrition with prolonged institutional privation would be associated with a general increase in all forms of psychopathology.

This goes with out saying that every member of the society has to contribute to address the psychological and physical necessities of these needy, helpless children.

Some priority areas that need immediate attention are an improvement in education quality, living standards, facilitating training of caregiver staff working in orphanages and providing mental health services in such a way that a healthy competitive atmosphere breeds between institutions. This will prompt different orphanages to strive harder for achieving more and performing better than others⁴⁰.

Assuring the orphans a secure future depends on society commitment and contribution. Kashmiris spend a huge sum on celebrating marriages, festivals and other events exhibiting pomp and show. If only these extravaganzas and expensive customs are omitted, a huge sum, as corpus for the welfare of hundreds of orphans will be readily available to the community to look after these destitute children. This can facilitate launching various income generating programmes for them.

Stress should also be laid on income of generating abilities in orphaned children, through vocational training in areas of their interest, such as tailoring, electrical repairing, carpentry, masonry and animal husbandry, as is done through programmes developed by UNICEF at other places where the number of orphans is on rise, e.g. Rwanda⁴¹. Keeping in view the utility and demand, the children can also be trained in computers for better future prospects.

Various government agencies, companies and foundations need to fund programmes aimed at providing schools for education and small-scale industrial units and corporate for their rehabilitation. Even families and individuals can help these destitute children by sponsoring a child from outside the orphanage and giving money to an orphanage on behalf of a specific child. Fortunately, our cultural background is such that every family stands introduced to a system of contribution in terms of money, as Zakat (Muslim tax on one's savings), Usher (on Crops) and essential charities on Eid festivals, hides of sacrificial animals and charities during Ramadhna, the month of fastings to help destitute children, especially orphans, as recently pointed out by Suri A, "Every Kashmiri family is effectively an NGO in its own way"^{42,43}. To ensure continued support for orphans, the institutions with sustained support of the whole society needs to initiate

efforts to become autonomous. New schools need to be designed in such a way that they serve multiple common needs of these children. We certainly need to know more about multiple difficulties faced by orphans like poverty, trauma, stigma etc.

An orphan before 1990s' would mostly get adopted by one of his/her relatives or neighbors in accordance with religious and social practice, so the need for orphanage was never felt, as is supported by the fact that only one orphanage existed in Srinagar city before 1986⁴². Actually, it was not until 1996-97, that a number of NGOs started functioning in J&K, especially in the domain of orphan care⁴². All the orphanages in total, however, take care of hardly 1000-2000 children⁴¹, with the result 80-90% of orphans still continue to wait for help. Off late, many institutions within and outside the government have started contributing in managing the massive burden that the situation has created. NGOs, however seem to be outshining the state effort that have remained more or less a political hype.⁴³ Two recent natural disasters, Watego snowstorm⁴⁴ and Oct 8 Kashmir earthquake, left behind thousands of orphans in need of food, shelter and education. There are both legal and social problems for long term rehabilitation of children as was evident from the recent litigation ban on controversial adoption, of disaster surviving orphans, by the government⁴⁵. As the children orphaned exceed the reserves of existing orphanages, there is an emergent need for enforcing more widespread residential and rehabilitation facility throughout the expanse of the traumatized state of J&K. Even these facilities would not suffice the needs of hundreds and thousands of orphans. Though no single orphan died of hunger in Kashmir in last 15 years, yet they are part of the underprivileged lot that requires special attention involving extra ordinary efforts. More healthy and convenient methods in this direction would be to help the surviving relatives of orphans to bring up these children in a traditional family atmosphere, which is only possible if the collective conscience of society awakens from the slumber of indifference. This will have many long-term collateral gains, not only for the orphans, but also for the whole society at large.

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PSYCHIATRIC DISORDERS AMONG CHILDREN LIVING IN ORPHANAGES – EXPERIENCE FROM KASHMIR

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In the conflict torn developing countries, where adoption and foster care are little practised, orphanages remain one of the few means of survival of innumerable orphans. Critical research, however, has portrayed orphanages as a breeding ground for psychopathology. This study was taken up to examine this opinion. An orphanage for girls in Srinagar was surveyed by Psychiatrists, and using DSM IV guidelines screened children were evaluated for psychopathology. Children were in the age group of 5-12 yrs. PTSD was the commonest psychiatric disorders (40.62%), easily attributable to the prevailing mass trauma state of almost two decades. Next commonest diagnoses were MDD (25%) and conversion disorder (12.5%). A high psychopathology in orphanages could be an important guide for policy makers to plan for better rehabilitation and social reintegration of orphans.
(JK-Practitioner 2006;13(Suppl 1):S53-S55)

Keywords : orphanage, psychopathology, PTSD

An Orphanage is often examined through problematic psycho-social functioning of children.¹ There is general agreement among researchers that children placed in orphanage settings at a young age and for long periods of time are at greatly increased risks for development of serious psychopathology later in life. From this agreement, has emerged a general notion that orphanages are breeding grounds for many psychiatric problems.^{2,4} However, this concept loses its relevance at places affected with long term conflicts, poverty or countries devastated by various disasters, as orphanages are often the only viable option of survival for these children. This is more relevant in third world countries which suffer more frequent disasters and are also among the most conflict torn areas of world with thousands of orphans.^{5,7} Unlike the West adoption and foster care at such places are often culturally un-acceptable and logistically unrealistic solutions^{8,9}. Anna Freud, concluded from several case studies that institutionalized children are doomed to fail psychologically because of maternal deprivation. This was despite good physical and social care.¹⁰ Another psycho-analytically trained psychiatrist, John Bowlby also reported that maternal – deprivation was the central issue, causing psychological damage to orphanage children.¹¹ Goodwin argues that any amount of orphanage experience is harmful, the damage is greatest during first year of life and increases dramatically with length of stay in an institution.¹²

Results of some other studies from eastern Europe also suggest that there is major developmental impairment in children who suffer profound institutional privation at infancy or early childhood and that such children show good developmental catch-up, following adoption in well functioning families.¹³⁻¹⁴

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Materials and Methods

The study was carried out to look for psychiatric morbidity pattern in Kashmiri children living in orphanages. The only orphanage exclusively meant for female children, 10-15 kilometers away from Srinagar city was selected for the study. A qualified doctor who was voluntarily working with the said orphanage in providing medical service was also involved in the study. The job assigned to the doctor after training him in administration of mini-kid screening was to identify the children who seemed to have psychological/psychiatric problems. Out of the total 76 inmates, he identified 40 children, who were later examined by two trainee psychiatrists in the orphanage setting itself. Out of these 40 children 32 had DSM IV TR based diagnosis of psychiatric disorders, which was established after discussing with the first author.

Results

Total Number of Children	-	76 (100%)
Children with psychiatric morbidity	-	32 (42.10%)

Socio-demographic Variables

1. Age group	-	5 years to 12 years
		Mean 8.59 years
2. Sex	-	32 females
3. Family status	-	26 – Nuclear - 81.25%
		04 – Joint - 12.40%
		02 – Extended - 6.25%

Socio-economic Status – Lower Class – 32

Psychiatric Diagnosis:

1. PTSD	-	13 (40.62%)
2. MDD	-	08 (25.0%)
3. Conversion disorder	-	04 (12.5%)
4. Panic Disorder	-	03 (9.38%)
5. ADHD	-	02 (6.25%)
6. Seizure disorder	-	02 (6.5%)

Discussion

The belief that orphanages are bad for children is still held by many child care professionals. Young children fail to develop as they should both socially and psychologically. The harm is even more certain, if

children are admitted as infants and remain in privation for several years. Early in the 20th century, experts in child care expressed the view that family care is preferable to orphanage care for needy children. This view seemed based on personal preferences rather than careful comparison of their relative merit.¹⁴

The present study assessing the psychiatric morbidity in orphanage children of chronic strife torn Kashmir is one of the first of its kind from an area of chronic mass trauma situation continuing for more than a decade. (Years of stress free happy go lucky attitude and camaraderie in Kashmir which was one of the most peaceful places in the sub-continent abruptly got transformed into disturbed and insecure area with people living life on moment to moment basis). This sudden change in the environment with unending violence resulted in continued process of destruction of life and property. Children form 40% of the population in developing countries. In Kashmir they have been exposed to the traumatic conditions in the form of being witness to the killing of their near ones or have experienced the traumatic events themselves¹⁵. Many children were themselves rendered homeless and many orphaned. Because of loss of social support network which chronic conflict is known to cause, many of these young traumatized children landed up in orphanages.

Out of 76 children screened a total number of 32 children had DSM IV psychiatric morbidity. All the children were females in age group 5 years to 12 years with mean of 8.5 years. Majority of children 81.25% (n=26) were from nuclear families, followed by 12.50% (n=4) from joint families and 6.25% (n=2) from extended families.

All the children belonged to lower socio-economic class, all these findings of the present study are in agreement with the findings of a study conducted on orphanage meant for boys in Kashmir¹⁶. Post-traumatic Stress Disorder (PTSD) was the commonest diagnosis present in 40.62% (n=13) of the sample, followed by Major Depressive Disorder (MDD) 25% (n=8), Conversion Disorder 12.5% (n=4), panic disorder 9.38% (n=3), Attention Deficit Hyperkinetic Disorder (ADHD) 6.25% (n=2) and seizure disorder 6.2% (n=2). In the earlier study PTSD was present in 16% of children (boys) in orphanages¹⁶.

The increased number of PTSD cases in the present study may be due to the fact that all the children in the study had experienced the traumatic event in the form of death of father, which was sudden, unexpected, natural or man-made. Further confounding factors of younger age¹⁷, being female,¹⁸ lower socio-economic class,¹⁹ which are known to be risk factors for PTSD were present in our sample.

25% of children in the orphanage had major depressive disorder (MDD), which may be explained by various variables including the fact that all the children had lost one of their parent, before the age of 11 years. All

were females from lower socioeconomic class which are known risk factors for the development of depression²⁰.

Children who grow up in orphanages or foster care usually have no social connections, and these children are at a disadvantage for completing high school, going to college, or getting job opportunities all of which may be contributing factors in predisposing a child to psychopathology.²¹

Studies have shown that institutionalized children have high rates of psychiatric symptoms²². Duration of institutionalization, physical structure, and age at abandonment differentially relate to psychiatric symptoms²². A positive social orientation and clear standards of behaviour are protective factors a family provides against the development of psychiatric symptoms.

Children in institutional care are extremely vulnerable to psychological problems, and institutionalization in long term, in early childhood increases the likelihood that they will grow into psychologically impaired and economically unproductive adults²³. It has also been observed that in an orphanage setting children's emotional and behavioural status worsens and even in well run institutions children develop a range of negative behaviours, including aggression and indiscriminate affection towards adults²⁴.

Individuals placed in orphanages early in their lives are at greater risk when they reach adulthood of living in poverty, developing psychiatric disorders, having difficulties in interpersonal relationships, and having serious problems parenting their own children²⁵.

The overall high prevalence of psychiatric morbidity in orphan children population could be attributed to the serious social implications of the turmoil to the Kashmiri families. Thousands of children got orphaned and their families broken. There is hardly a family in the valley that has not been affected. More than 50,000 families are rendered homeless and as such have lost their initiative to protect themselves or their children²⁵.

Conclusions:

Psychiatric morbidity, especially PTSD and MDD are common in children in present day orphanage setting of Kashmir. Even though there are no definite studies of prevalence of psychiatric disorders in orphanages and institutionalized children, our data represents an attempt towards finding psychiatric morbidity in this vulnerable population of children. However in order to generalize our findings further studies are needed in this regard.

Limitations:

- 1) Study was limited to a single female orphanage.
- 2) This study does not describe the socially based emotions and behavior of children in general and has studied only diagnosable psychiatric disorders in orphanage inmates.

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SECTION - III

In serpentine queues and dank corridors
awaiting the remedy to their despair.....hope.....

TREATMENT SEEKING POSTTRAUMATIC STRESS DISORDER PATIENT POPULATION- EXPERIENCE FROM KASHMIR

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It has been argued that PTSD patients who seek treatment are rather atypical of the usual PTSD population. To study the profile of such patients in an Asian setup, from where hardly any such study has been reported, we surveyed 469 consecutive PTSD patients seeking treatment at psychiatric diseases hospital, Srinagar, who were diagnosed using DSM-IV guidelines. Married subjects (50.71%) predominated, while most (62.68%) belonged to joint families. Majority (61.19%) belonged to the middle class. Most of the subjects had a low educational achievement (76.11% were below matric). Importantly, males (46.26%) and females (53.13%) had a comparable representation. Most patients (85.07%) had a chronic PTSD. 67% of patients had comorbid depression. (JK-Practitioner 2006;13(Suppl 1):S57-S60)

Keywords: PTSD, treatment seeking, risk factors, CAPS.

Introduction

PTSD is often a severe debilitating disorder resulting from exposure to a traumatic event/events. DSM-III provided operational criteria for diagnosing PTSD which is classified into acute and chronic types.¹ Diagnostic and statistical manual of mental disorders IV edition defines post traumatic stress disorder (PTSD) as a set of symptoms which occur after "the person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury or a threat to physical integrity of self or others" and "the person's response involved intense fear, helplessness or horror". In addition to a traumatic event, it requires the presence of one "re-experiencing" three 'avoidance' and two increased 'arousal' symptoms for diagnosis, the above symptoms of more than one month duration. In addition, it is specified into acute PTSD if duration of symptoms is less than 3 months and chronic PTSD if duration of symptoms is 3 months or more.²

Examining the longitudinal course of PTSD raises a series of conceptional issues about the relationship between PTSD and the other disorders and the way in which risk factors influence susceptibility to the disorder and its remission.³ Blank highlighted the fact that the longitudinal course of PTSD has multiple variations and suggested that these need to be discriminated from the acute, delayed, chronic, intermittent, residual and reactivated patterns.⁴ Combat exposure has been found to

be strongly related to PTSD symptoms even after effects of socioeconomic status, race, age and pre-service mental status examination are controlled for.⁵ A number of studies clearly show that the conditional risk for PTSD is substantially higher among people exposed to chronic combat trauma than among victims of the trauma more characteristic of developed countries. 65% of the Bosnian refugees resettled in the USA suffered from PTSD while 72.8% of the Palestinian children exposed to war trauma experienced PTSD.⁶⁻⁹ PTSD prevalence rates ranging from 20.4% to 42% have been reported from Afghanistan.¹⁰⁻¹¹ Similarly a family study in Iraq reported 87% of children and 60% of their care givers suffering from PTSD¹², while as another study in Sri Lanka has reported a prevalence of 27% among civilian population.¹³ Research data reveals that conflict situations give rise to more deaths and disability than any major disease.¹⁴

Few epidemiological studies, most of them retrospective, have focussed on the natural course of PTSD and its determinants. Chronic PTSD was frequently been reported in rape victims, victims of torture and political violence, refugees and combat veterans.^{15,17} Breslau and Davis reported that as compared to young adults with non-chronic PTSD, those with chronic PTSD had a higher number of DSM-III-R PTSD symptoms and higher rates of interpersonal numbing and over reactivity to stimuli, that symbolised the stressor, as well as higher rates of comorbidity and other medical disorders.¹⁶ Davidson et al reported that chronic PTSD was associated with reduced social support, a greater frequency of social phobia, and greater avoidant symptoms.¹⁷ Individuals with peri-traumatic dissociation are believed to be 4-5 times more likely than those without such phenomenon to develop both acute and chronic PTSD.¹⁸ Findings with regard to gender are conflicting, in that the female gender was found to be associated with chronic PTSD in one study¹⁶ but with only acute PTSD in another.¹⁹ Familial instability is associated with increase prevalence of PTSD²⁰ where as good social support is associated with lower levels of symptoms.²¹ PTSD is not the only psychiatric disorder, that develops after exposure to trauma. On the contrary, comorbidity is the norm rather

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A part of the study was presented in the 17th Annual Meeting of The International Society for Traumatic Stress Studies, December 6, 2001, New Orleans Louisiana, U.S.A. - under the title "First Report of PTSD in Disturbed Kashmir: Characteristics of a Treatment Seeking Sample" - reflected in the abstract p. 19 under F201.

than exception.²²⁻²³ Kessler's comorbidity survey (1995) showed that 79% of women and 88% of men with lifetime diagnosis of PTSD met the criteria for at least other lifetime psychiatric disorder. The most common comorbid conditions were major depression, other anxiety disorders and alcohol abuse/dependence.²⁴

Data reveals that during the past fifteen years, due to prevailing violent conditions in Kashmir, there has been a phenomenal increase in psychiatric morbidity, including stress related disorders.²⁵ A study of treatment seeking population of PTSD patients could be very helpful in understanding the development, course and effect of various factors on PTSD and tailor the services according to the needs of population. We present here the characteristics of treatment seeking PTSD patients, while as the observations on the management and treatment of these patients is being reported separately.

Material and Methods

The study was carried out on 469 consecutive PTSD patients who sought treatment at the Government Psychiatric Diseases Hospital, Srinagar from 1st August 2000 to 1st July 2005, the sole mental health diseases hospital of Kashmir that caters to the needs of whole population of Kashmir valley, adjoining areas of Jammu region and Ladakh. Diagnostic and statistical manual IV ed. DSM-IV of American Psychiatric Association was the diagnostic tool used to diagnose the patients.² After proper consent, a detailed history, mental status examination and general physical examination was carried out. Patients with more than 16 years of age were included in the study. Patients with illicit substance use, major medical condition and neurological disorders were excluded from the study.

The severity of PTSD cluster symptoms was assessed by Clinician Administered PTSD Scale (CAPS). Patients were also assessed for comorbid depression. In addition complete socio-demographic profile of patients was recorded with other details like history of torture, killing of relatives, exposure to some other traumatic event or a disaster.

Results and Observations:

The details of the results are given in Table 1.

Discussion

Our study is one of the first of its kind from Indian subcontinent which discusses the various factors related to development and longitudinal course of PTSD in treatment seeking patient population. From a total sample of 469 PTSD patients, 53.73% comprised of female patients and the duration of illness at the time of first contact was 31.88 months in females and 47.71 months in males. Although the community prevalence of trauma for males and females is almost similar in Kashmir valley,²⁶ the fact that the number of female PTSD patients seeking treatment is more with less duration of illness may be due to the fact that males usually do not express their distress as compared to females and females are known to seek treatment for psychological problems more readily than men.²⁸ The severity of PTSD symptoms is more in females than males which may be due to relatively early treatment seeking. The almost equal prevalence of PTSD in both

sexes in the treatment seeking patient population is consistent with the community prevalence of PTSD in Kashmir with current PTSD in males is 7.27% and 7.13% in females.²⁷ But this is not in agreement with Kessler et al who reported higher prevalence in females.²⁴ Most of the patients (56.71%) are married with earlier treatment

Table 1

Profile	No. of Patients	CAPS (Mean)	Duration in months(Mean)
SEX			
Male	217 (46.26%)	43.77	47.71
Female	252 (53.73%)	53.06	31.88
		p=0.84	
MARITAL STATUS			
Divorced, Separated			
Widowed, Unmarried	203 (43.28%)	47.93	46.06
Married	266 (56.71%)	49.39	33.65
		p=0.071	
FAMILY STATUS			
Joint	294 (62.68%)	46.12	41.09
Nuclear	175 (37.31%)	53.20	35.93
		p=0.000	
EDUCATION			
< Matric	357 (76.11%)	51.27	41.53
> Matric	112 (23.88%)	40.75	32.03
		p=0.000	
SOCIAL ECONOMIC STATUS			
Middle Class	287 (61.19%)	45.90	36.46
Lower Class	182 (38.80%)	54.80	41.45
		p=0.000	
DISSOCIATION			
Absent	308 (65.67%)	46.16	42.83
Present	154 (32.83%)	54.91	32.88
DURATION			
Acute	70 (14.92%)	—	1.51
Chronic	399 (85.07%)	—	45.25
ONSET			
Immediate	322 (68.65%)	—	—
Delayed	147 (31.34%)	—	—
DEPRESSION(comorbid)			
Total patients	314 (67.00%)		
Male	140 (64.51%)		
Female	174 (69.04%)		
TOTAL SAMPLE	469	48.76	40.02

seeking (33.65 months in married patients and 46.09 months in unmarried, divorced, widowed), showing almost similar severity of PTSD symptoms in both married and the other group (p=0.071). Our findings are in agreement with Kessler et al who found life time prevalence of PTSD more among married respondents²⁴ and differ with the opinions made by Carlier et al²⁹. 62.68% of patients belonged to joint family and only 37.31% to nuclear family, such may be due to still prevailing joint family pattern, particularly in rural areas of Kashmir. The mean months between onset of PTSD and treatment seeking is less (35.93 months) in nuclear families than joint families (41.09 months) and the symptoms severity is more in nuclear families (P=0.000) which is in accordance with the observation that good social support is associated with lower levels of symptoms³¹ and history of family in stability with increased prevalence of PTSD.³⁰ 61.19% of

patients studied belonged to middle class while as 38.80% to lower class but the severity of PTSD symptoms was more in lower class compared to middle class ($p=0.000$) and mean interval duration of treatment seeking was more in lower class. These findings are consistent with Brewin et al who reported lower socio economic status as a risk factor for development of PTSD.³⁰ Majority of our sample (76.11%) are less educated or illiterate with higher scores of PTSD symptoms ($p=0.000$) and longer duration of symptoms at the time of treatment seeking as compared to educated patients which is in accordance with earlier studies that low education is a risk factor for development of PTSD and higher education has a protective effect.^{30,32} It has been reported that cognitive disadvantage impairs coping which may hamper recovery following exposure to trauma.³² 32.83% of patients had history of dissociation with high CAPS scores as compared to 65.67% of patients with no history of dissociation, had low intensity of PTSD symptoms.

68.15% of patients had immediate onset of PTSD while as 31.34% of patients had delayed onset. 85.07% of our patients had chronic PTSD which may be due to the fact that most of the patients had sought treatment after mean duration of about 40 months. Men tended to have more chronic course as compared to females. The chronic course of PTSD may be explained because of chronic war like situation, exposing individuals to repeated traumas and these findings are consistent with studies that people exposed to chronic combat are more likely to develop

chronic PTSD.³³ Studies have revealed that traumas due to deliberate human malice (versus natural or accidental traumas) may be stronger predictors of PTSD and reduce recovery from PTSD.³⁴ 67% ($n=314$) of patients had comorbid depression out of which 64.51% ($n=140$) males and 69.04% ($n=174$) females in comparison to NCS results where it was 47.9% in males and 48.5% in women.³⁴ It is known that only atypical cases of PTSD seek treatment, while as majority do not.³⁵ The community prevalence of trauma exposure in general population is 58.69% (59.51% in males and 57.36% in females), in Kashmir²⁶, while as the lifetime prevalence of PTSD in community is 15.19%³⁷. An earlier hospital based study reveals that out of the total treatment seeking patient population only 2.38% had PTSD³⁴. From the above facts, it is apparent that only a minority of PTSD patients seek treatment in spite of a very high community prevalence of PTSD, which can be explained due to various reasons like lack of awareness about trauma related disorders in general population and in health care providers, considering post trauma symptoms a natural phenomenon, which cannot be cured, overlap between the symptoms of PTSD and various mood/anxiety disorders, etc.

In conclusion, PTSD is highly prevalent in general population but treatment seeking for the same is not, and measures need to be taken to educate general population as well as the healthcare providers to identify it at the earliest to avoid the crippling consequences and improve the quality of life of these PTSD patients.

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FAMILY STUDY OF ADULT PTSD PATIENTS IN SOUTH ASIA – EXPERIENCE FROM KASHMIR

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A lot of factors influence the development and persistence of symptoms of PTSD, not the least important of which is family environment. This however has not been studied much in the past. On these lines, a family study was conducted on 221 relatives of 50 PTSD patients, seeking treatment at the Government Psychiatric Diseases Hospital, Srinagar. Evaluation was done using DSM-IV and ICD-10 criteria based mini plus neuro-psychiatric inventory. 62 percent of the family members had psychiatric morbidity, with PTSD being the common diagnosis (32.12%), followed by major depressive disorder MDD (19.45%) and generalised anxiety disorder (4.53%). Most of the subjects (66.95%) were in the age range of 18-45 years, with those with PTSD out-numbering normal subjects in this age interval (65.46% viz. 59.14%). Similarly subject group with PTSD was less educated (46.47% illiterate) than the normal subjects (17.83% illiterate). Females and males were almost equally affected in PTSD group, when compared to the normal subjects. Most of the subjects with PTSD were running a chronic course (84%). These figures have an important bearing on understanding family influence in developing psychiatric disorders and their influence on treatment.

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Keywords : PTSD, family study

Introduction

Post traumatic stress disorder is one of the many responses that can occur following exposure to traumatic events. In the West overall community life time prevalence estimates range from a minimum of 1% in earlier DSM III studies to maximum of 12.3% in more recent surveys¹.

Traumatic events are very common in most societies, though prevalence has been best studied in developed nations particularly in the U.S.A.². Prevalence of PTSD is greater in population at risk including army combatants, civilians in war zones, refugees etc. The National Vietnam Veterans Readjustment study found a lifetime prevalence of 30.9% for males and 26% for female veterans³. A study in 1990 found that combat exposure remained strongly related to PTSD symptoms even after effects of socio-economic status, race, age and pre-service mental status were controlled for⁴. A history of prior exposure to trauma is an extremely potent risk factor for PTSD⁵ and previous exposure to trauma signals a greater risk for PTSD from subsequent trauma and multiple previous events had stronger effect than a single previous incident⁶.

An increased susceptibility of the family members to PTSD following traumatic exposure as evidence of biological/genetic factors remains to be interpreted⁷. PTSD was associated with greater familial anxiety when compared with controls who had experienced combat. When World War II and Vietnam Veterans with PTSD were compared, higher morbidity risk for alcohol and drug abuse was found in siblings/parents of Vietnam Veterans and a higher morbidity risk was found for the chronic psychiatric disorders in the children of Vietnam Veterans⁸.

A family study of 36 patients with chronic PTSD revealed a positive history of familial psychopathology in 66% of the patients. Alcoholism, depression and anxiety disorders were the disorders most commonly found⁹.

Scientific data reveals that during the continued violent conditions over the past 15 years in Kashmir, there has been a phenomenal increase in psychiatric morbidity including stress related disorders¹⁰. The assessment of qualitative or quantitative status of such phenomena can significantly contribute to understanding the role of environmental factors in the causation or precipitation of various psychiatric disorders including stress related disorders. Scientific research validates different disease models that emphasize the interaction between organic and environmental factors as determinants of health and illness. Family stability and social support are important determinants of such interaction as family instability and poor social support are associated with increased prevalence of psychiatric morbidity including stress related disorders^{11,12}.

Giving the stressful circumstances prevailing in Kashmir, a study of the families of PTSD patients could be very helpful in understanding the mental health status of family members in PTSD and obtaining crucial information about such matters, in the developing world. The present study was carried out with this as the main objective.

Material and Methods

The study was carried out on 221 first-degree relatives of fifty consecutive PTSD patients who sought treatment at the Government Hospital for Psychiatric Diseases, Srinagar (J&K). The patients were diagnosed according to the DSM IV laid criteria for PTSD¹³ and severity of the PTSD was assessed by Clinician Administered PTSD Scale¹⁴. A detailed history and physical examination was done in each patient to rule out any medical problem. Subjects with illicit drug use, major medical problems and neurological disorders were excluded from the study. Complete family history of the patient along with the contact number and residential address was taken.

Out of the 245 first-degree family members above 18 years, 221 were available for interview. Majority (n=173) of these interviews took place in the homes of the relatives. Some of the interviews were conducted in the out reach spot (n=12), hospital (n=32) and working places (n=5). 24 family members could not be interviewed either because of

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non-availability of the person or consent or due to exclusion criteria. All family members were interviewed using the DSM IV and ICD 10 criteria based MINI Plus (Mini Neuro Psychiatric Interview) scale¹⁴, which has high validation, reliability scores and can be administered over a brief period of time. The family members were screened for presence of any psychiatric disorder.

Exclusion Criteria:

1. Age below 18 years.
2. Who did consent.
3. With known neurological disorder or neurodeficit on examination.
4. With severe medical disorders.
5. Families of patients living separately from patient.

Statistical Analysis

Patients were grouped according to the age, sex, occupation, marital status, education. Family members were grouped according to the age, sex, occupation, marital status, education and were classified as normal and with disorders. The differences between the normal and the PTSD groups in socio-demographic data was compared using chi-square analysis. The risk for developing PTSD in context in different family socio-demographic variables was assessed using the odd's-ratio.

Criteria for statistical significance was $p < 0.05$.

Results

Socio-Demographic Profile of Pro-bands

The age of the pro-bands ranged from 18-67 years with mean age being 39.76 ± 16.24 years. Females 62.00% ($n=31$) out-number the males 38% ($n=19$) in the total group of pro-bands. Most of the probands were married forming the largest group ($n=30$) 60% followed by unmarried ($n=14$) 28% and widowed ($n=6$) 12%. Majority of the sample comprised of house-wives ($n=22$), 44%. Government and self-employed formed 16% each followed by students and farmers 12% each. 44% ($n=22$) of our sample were illiterates followed by 38% ($n=19$) of under-graduate population. 54% ($n=27$) of our pro-bands were from joint families and 32% ($n=16$) belonged to nuclear families, whereas 14% ($n=7$) belonged to extended type of families. Most of the pro-bands were from rural areas (70%) and 30 % were from urban background.

Family Study

Psychiatric morbidity

Very high (62%) psychiatric morbidity was observed among the family members of the pro-bands. Majority of the group was of post-traumatic disorder 32.12% ($n=71$) followed by major depressive disorder 19.45% ($n=43$), 4.52% ($n=10$) of the group suffered from generalized anxiety disorder followed by adjustment disorder (2.26%). Substance use disorder and panic disorder with agoraphobia was found in 1.8% ($n=4$) family members each. 38% ($n=34$) of the family members has no psychiatric disorder.

Comparison between PTSD and normal family members

1. Age:

Most of the family members in both groups belonged to the younger age group (18-45 years) forming 65.46 % and 59.14 % for the normal and PTSD group respectively.

The older (>45) formed 34.54% and 40.86% for normal and PTSD group respectively. The difference between the younger and older group was not statistically significant.

2. Education of Family members (normal and PTSD)

There were more illiterates (46.74%) in the PTSD than in normal group (17.85%). This difference between the two groups was statistically significant ($p=0.000$).

3. Marital status

54.92 % ($n=39$) and 57.14% ($n=48$) of the family members in the PTSD and normal groups were married respectively. The unmarried formed 42.25% and 36.90% in the PTSD and normal group respectively. This difference was not statistically significant ($p=0.56$).

4. Occupation

Majority of the family members in the PTSD group were self employed ($n=22$) followed by house-wives ($n=17$), students ($n=12$), government employed ($n=11$) and farmer ($n=9$). In contrast in the normal group majority were government employed and farmers ($n=17$ each), students ($n=16$) and house-wives ($n=11$). There was no significant association between different occupations and PTSD ($p=0.085$). However, an association between employment and PTSD is significant. The likelihood of PTSD in self-employed group is 2.7 times higher than in the employed group ($p=0.041$).

5. Sex

58.62% ($n=34$) females and 38.14% males ($n=37$) had PTSD and 41.37% ($n=24$) females and 61.85% ($n=60$) males were normal ($p=0.020$) indicating likelihood of PTSD, 2.29 times more in females than in males.

Discussion:

Other than traumatic events a number of other variables including childhood conduct disorder symptoms, age and education are being studied to elucidate their role as risk factors for development of post-traumatic stress disorder¹⁵. Familial influence on susceptibility to PTSD has been suggested by family history research¹⁶ and studies of second generation¹⁷.

The present study, first of its kind from the developing world reveals that majority (80% of the sample) were in age group of 18-45 years. A very high percentage of pro-bands from this age group in our study is in keeping with the observation that younger people are known to have higher incidence of exposure to the violence and subsequent PTSD compared to older people⁶. Our study reveals an alarmingly higher (62%) prevalence of psychiatric disorders among the family members of treatment seeking cases of PTSD⁹. These findings are in agreement with the earlier American studies by Davidson et al. which reported psychiatric morbidity in 66% of family members. Slightly higher percentage morbidity in the USA study may be due to the smaller size of sample ($n=37$ members) as compared to a large number of 221 members in our study. Majority (62%) of the cases in our sample comprised of females which is consistent with the findings of two American studies by Kessler et al²⁰ and Breslau et al²¹, who also observed that females have 2.38 – 2.49 times more likelihood of developing PTSD than men. Most of the pro-bands are illiterate. This may be because most of the people who visit our hospital are from poor

background. This is due to the social stigma. 44% of the sample comprised of house wives which also forms the largest group, 54% of patients belonged to joint families and 32% belonged to nuclear families. This is in keeping with the prevalent socio-cultural factors as joint family is still preferred, especially in rural settings. The findings have been replicated earlier in the previous study were 59% belonged to joint families²².

84% of the sample had an acute onset PTSD, which was running a chronic course. In the previous study 67% of the patients had an acute onset PTSD²².

62% of the family members of the pro-bands in our study had psychiatric morbidity. This finding is in agreement with the earliest study from Davidson et al⁹, where there was a positive history of psycho-pathology in 66% of family members. Our study reveals that the incidence of PTSD is very high (32.12%) in family members of the pro-bands, which is much higher when compared with the population based studies from U.S.A.²¹, which can be explained due to high occurrence of traumatic events in Kashmir compared to the other parts of the world²³.

Another finding from the study of Davidson et al⁹, who reported alcoholism as the most common disorder among the family members in contrast to our study where PTSD is the most common diagnosis. This difference may be due to the social acceptance towards alcohol in Kashmir due to socio-religious factors²⁴.

Our study shows that family members who suffered from PTSD had average low educational level as compared to family members who were normal. The illiterates were almost four times more likely to have PTSD than the literate family members. This finding is consistent with Vietnam Veterans Readjustment Study which reported low levels of pre-military educational achievement, were at greater risk of developing PTSD than

were the other Veterans⁴. Pitman et al also found that low scores on pre-military arithmetic aptitude test were associated with chronic PTSD²⁵. It has been reported that cognitive disadvantage impairs coping, which may hamper recovery following exposure to trauma²⁶.

Another important finding in our study has been significant association between employment and development of PTSD. The incidence of PTSD in the self-employed group is more than that in the government-employed group.

Taking PTSD along with other anxiety disorders like GAD and Panic disorder with agoraphobia, anxiety disorders formed the largest group of disorders in the family members of the pro-bands. 94% of PTSD patients had co morbid depression, which is in agreement with the findings that affective disorders rather than anxiety disorders are significantly associated with PTSD²⁷. These findings concur with the findings of National Co morbidity survey, which showed affective disorders were the only form of psychiatric disorders significantly associated with PTSD²¹. The other reason may be that there is symptom overlap between PTSD and MDD and some researchers argue that PTSD should be considered as a disorder more akin to depression than anxiety disorders²⁸.

Conclusion:

The incidence of PTSD among family members of PTSD pro-bands was high compared with the population studies reported mostly from west. PTSD is more common in younger age group (18-45 years), illiterates than educated, 2.29 times more common in females than males, job security has a protective effect against the development of PTSD. Most of the patients had an acute onset but the pro-bands as well as the family member were running a chronic course, majority of the PTSD cases had a co morbid psychiatric disorder most commonly depression.

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SECTION - IV

In any endeavour of a scientific nature, investigation either lend credence to a theory or disprove an assumption as being just that

A PRELIMINARY INVESTIGATION ON SEROTONIN TRANSPORTER GENE REGULATORY REGION POLYMORPHISM IN POST TRAUMATIC STRESS DISORDER

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Among many factors responsible for the development of PTSD, genetic factors have so far been one of the least understood. Genes encoding proteins involved in neuro-transmission, especially serotonergic, are a potential substrate for such understanding. One such gene is the serotonin transporter (5HTT) gene located on Chr 17, spanning 31 kb, more specifically its promoter region which exhibits polymorphism-existing either as 448 bp Short allele (S) or 528 bp Long allele (L). Short allele is associated with reduced functional capacity of serotonin transporter relative to the long allele, and has in animal experiments been associated with anxiety traits. DNA samples from the peripheral blood samples were studied collaterally from 67 subjects (30 males and 37 females) diagnosed with PTSD using DSM-IV guidelines and 67 matched controls, using polymerase chain reaction. The allele sizes were determined by the comparison of bands with size standards after electrophoresis in 8% Polyacrylamide gel, followed by silver staining. 77.61 % of PTSD subjects had a short variant (LS and SS) of 5HTT promoter compared to 68.88% in control subjects. This study gives a preliminary evidence of lowered serotonin transport capacity in PTSD patients. Similar studies using larger sample sizes targeting other neurotransmitter mechanisms are warranted for further elucidation of genetic basis of PTSD.

(JK-Practitioner 2006;13(Suppl 1):S66-S68)

Keywords : PTSD, serotonin transporter polymorphism, promoter region, short allele long allele,

Introduction

Natural catastrophes, wars and other disasters affect large populations in different parts of the world and one of the many responses that can occur in the general population following exposure to such traumatic events is Post traumatic stress disorder (PTSD). PTSD is a complex and multi-factorial chronic anxiety disorder with an unknown exact etiology. Exposure to a traumatic event constitutes a necessary, but not sufficient factor for such disorders, though it in fact triggers a cascade of biological events that may ultimately lead to the occurrence of chronic PTSD. Thus, much remains to be learned about how trauma affects people's capacity to regulate bodily homeostasis and how years after the trauma has ceased, memories continue to dominate people's perceptions.

In contrast to the other major psychiatric disorders, large studies for the search of biochemical and genetic contribution to PTSD have not been described to date. Serotonin mediated neurotransmission contributes to different functions including motor activity, food intake, sleep and reproductive activity as well as cognition and emotional states of depression and anxiety. Genes encoding proteins involved in the neuro-transmission are major candidates in association studies of anxiety related traits¹, suicidal behaviour², mood disorder³, impulsivity⁴ and other complex disorders.⁵ The 5HT transporter (5HT-T) gene product receptor plays a key role in regulating the duration and magnitude of serotonergic responses for fine securing of brain serotonergic neurotransmission and the peripheral actions of serotonin¹. It provides the primary target for the action of selective anti-depressant drugs in

the brain⁶ and is responsible for the sodium dependent reuptake of serotonin from synapse after its release from serotonergic neurons, thus regulating the levels of available serotonin and serotonin turnover. The human serotonin transporter protein is encoded by a single gene located on chromosome 17q 11.1 – 17 q12; spans 31 kilo bases (kb) and consists of 14 exons.

Recent studies have reported both positive as well as negative association between the serotonin transporter (5-HTTPR) gene regulatory region polymorphism and various anxiety related disorders. Functionally two common alleles of serotonin transporter promoter region include short (S) allele of 448 bp and the long (L) allele of 528 bp. An attenuated promoter segment of (S) allele is associated with reduced transcription and functional capacity of serotonin transporter relative to (L) allele in non-human primates infants reared under more stressful conditions compared with those homozygous for the L allele. Infants with S allele showed increased emotional distress, elevated hypothalamic pituitary adrenal axis response to stress and reduced basal serotonergic functioning.⁶ Keeping the severity of the disorder in view identification of susceptibility genes involved in PTSD needs to be searched out. That in turn will increase our understanding of traumatic stress disorders and help to elucidate their molecular basis. Thus in order to explore the possible likelihood of serotonin transporter gene polymorphism in posttraumatic stress disorder we performed an association study of case (PTSD) control in Kashmiri inhabitants.

Materials and Methods

Selection and data collection from case control subjects

67 patients (30 males and 37 females) meeting DSMIV criteria for post traumatic stress disorder were recruited from consecutively diagnosed patients from the Out Patient Department of the only Psychiatric disease hospital of Kashmir valley and also from the private clinic of the second author (MAM). All the

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cases were included in the study after adequate explanation of the study procedure. After informed consent each patient was directly interviewed by the senior consultant psychiatrist (MAM). Clinicians administered PTSD scale (CAPS) developed by National Center for PTSD Staff (USA)⁷ was administered to request information about frequency and intensity of PTSD symptoms and of some associated symptoms which could have important implications for treatment and recovery. Healthy, 67 controls (30 males, 37 females) that had also experienced traumatic events but had never suffered from sufficient psychiatric illness were also included in the current study after getting informed consent from them.

Genetic analysis:

Genomic DNA was prepared from peripheral blood samples using Bangalore Genei Kit, India. The insertion/deletion in the promoter regulatory region of serotonin transporter gene was checked by amplification of this region by polymerase chain reaction with 'oligonucleotide primers 5'-GGCGTTGCCGCTCTGAATC-3' and 5'-GAGGGAC TG AGC TGGA CAAC CA C-3' (Bangalore Genei, India). Polymerase chain reaction were performed in Techgene thermal cycler (Techne, UK) with 50 ng genomic DNA and 10 pmol of each primer using PCR amplification kit (Imperial, India) in the total volume of 50 μ l. Cycling conditions were preceded by a denaturing step at 93°C for 5 min, followed by 35 cycles of denaturation at 94°C for 1 min, annealing at 61°C for 1 min and synthesis at 72°C for 1 min. Allele sizes were determined by the comparison of bands with size standards after electrophoresis in 8% polyacrylamide gel followed by silver staining.

Statistical analysis

Allele and genotype distributions in patients and control subjects were compared using χ^2 test and the test for Hardy-Weinberg equilibrium was performed for each sample.

Results and Discussion

As per earlier reports short variant of the polymorphism in serotonin transporter regulatory gene is believed to reduce the transcriptional efficiency of the 5HTT gene promoter and leading to decreased 5HTT expression and thus the decreased 5HT uptake. In order to check the status of both alleles serotonin transporter gene regulatory region in PTSD patients, in the current study the total sample size consisted of 67 PTSD patients with each of them having experienced at least one traumatic event along with equal number of controls. Recently, SS alleles in 5HTT gene promoter has been associated with anxiety related traits¹, and the long allele of 5HTT promoter has been shown to be 2-3 fold more active in

driving transcription⁸. In the current study the frequencies of 5-HTTL promoter genotypes containing the short variant ("LS and "SS") were found to be slightly lower (68.88%) in control subjects (without any history of PTSD) as compared to cases (77.61%) who were diagnosed as PTSD as per DSM V criteria (Table 1). Thus our preliminary investigation gives a clue that in selected PTSD cases there may be higher prevalence of short allele, possessing lower transport capacity, and hence lower uptake of 5-HT than the controls having a higher expression of long allele. This, thus justifies the risk of PTSD in them. However, there are some contradictory reports with respect to presence of either type of alleles. In one of the previous findings among the Japanese population with a genetic predisposition to emotional restraint and inter-personal sensitivity, that have been reported to have a low frequency of LL genotype with the majority of population with SS allele, which shows that in Japanese populations 5HTT gene regulatory region polymorphism is not related with anxiety related traits.¹¹

Table 1: Genotype counts of polymorphism within the Serotonin Transporter (5-HT) promoter in PTSD patients and normal control subjects.

5HTTLPR genotypes	Control subjects		PTSD patients	
	N	(%)	N	(%)
LL	21	31.34	15	22.39
LS	33	49.25	32	47.76
SS	13	19.41	20	29.85

Examination of various ethnic groups has revealed wide variation in various allele frequencies, the 10 repeat allele frequency ranged from 0.02 in Japanese to 0.47 in European Americans.¹² Interestingly no significant difference was found in the frequencies of long allele ("LL") among the selected cases and controls in the present study. These results are in consonance with the earlier reports that suggest that normally higher frequency of LL alleles of serotonin transporter gene are to be found in people without any psychiatric illness. A recent study on the interaction between adverse social support and serotonin in transporter gene polymorphism has revealed that maltreatment plus SS gene type had the highest vulnerability for psychopathology and depressive scores were two times higher than the maltreated children with other genotypes⁶. Therefore an interpretation of our results for possible involvement of 5HTTLPR polymorphism in PTSD is limited due to small size of sample and needs a large set of case control association studies to elucidate an association of polymorphism with the disorders, which indeed is the first of many steps towards understanding how genetic differences shape us^{13,14}.

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A PRELIMINARY MRI STUDY OF HIPPOCAMPAL VOLUME IN CHRONIC POSTTRAUMATIC STRESS DISORDER

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Since a long time, PTSD symptoms have been attributed to certain areas of the brain, the most important of which includes hippocampus. Considerable evidence points out a relation between stress and damage to hippocampus. To examine this theory a controlled study was conducted in Government Psychiatric Disease Hospital in Srinagar in collaboration with the Department of Radio Diagnosis, on seven patients diagnosed with PTSD using DSM-IV guidelines. Of the seven patients, five were males and two females. The patients were in the age range of 22-68 years with an average duration of PTSD of 21 months. Using appropriate MRI techniques and evaluation protocols, the hippocampal volumes were measured in both cases and controls. The preliminary results revealed smaller sizes of both hippocampi in PTSD samples as compared to controls. The results of longitudinal study using MRI and spectroscopic methods are, however, been evaluated for a final report in near future. (JK-Practitioner 2006;13(Suppl 1):S69-S71.

Keywords : PTSD, hippocampus, MRI, spectroscopy.

That traumatic events can cause psychological disorders in those who experience them is a well known fact¹. One disorder that has received considerable attention over the past two decades is post traumatic stress disorder (PTSD).

PTSD is a constellation of disabling behavioural and emotional symptoms that occur in some individuals who are exposed to severe psychological trauma in the form of combat, sexual abuse or natural disaster². The lifetime prevalence of PTSD has been found to be different in various epidemiological studies with the newer studies reporting a prevalence range of 7.8% - 12.3%^{3,4}, where as Margoob and Ajaz⁵ report 15.19% lifetime prevalence of PTSD in their findings.

Brain regions involved in memory are believed to mediate symptoms of PTSD⁶. A crucial role in learning and memory is played by hippocampus⁷. Considerable evidence suggests a relation between stress and damage to the hippocampus. A variety of animal studies have provided compelling evidence that hippocampus is sensitive to effects of stress⁸. Studies in a variety of animal species indicate that direct exposure to glucocorticoids (cortisol) results in neuronal loss and decrease in dendritic branching in the hippocampus^{10,11}, with associated deficits in memory function¹². Accordingly, a similar process may occur in humans, and survivors of traumatic events may develop hippocampal atrophy in a progressive manner.

The hippocampus and adjacent perirhinal, parahippocampal, and entorhinal cortex play an important role in short term memory⁸. Hippocampus is necessary for short term memory consolidation and HPA axis regulation. Signs of hippocampal damage (HPA axis dysregulation along with memory impairment) are found in affective disorder, Alzheimer's disease, and posttraumatic disorder¹³.

The mechanisms by which stress causes hippocampal degenerative changes in humans are a matter of debate^{14,15}. Another possibility that preexisting small hippocampal size increases the risk for exposure to trauma or for developing PTSD also exists^{16,2}.

Most of the studies have suggested that left hippocampus plays a greater role in the verbal memory¹⁷. Bilateral hippocampal lesions have been found to be associated with severe verbal memory impairment compared to unilateral lesions, thus suggesting that both hippocampi are involved in verbal memory.

Neuroimaging studies have demonstrated abnormalities in brain areas involved in memory in patients with PTSD. Many MRI studies have reported that chronic post Traumatic stress disorder (PTSD) is associated with lower than normal hippocampal volume^{14,21}, whereas some have not²². We, therefore, conducted a study to look at the hippocampal structure (measured with MRI) in persons suffering from chronic posttraumatic stress disorder.

Methods

The study was conducted in department of Psychiatry, Government Medical college Srinagar in collaboration with the department of Radiodiagnosis. The patient group consisted of 7 PTSD patients who met the DSM-IV criteria for PTSD.

Subjects with history of head injury or physical injury necessitating admission to hospital were excluded from the study. In addition subjects with history of life-time neurological disorder, psychiatric disorder, bipolar disorder and substance abuse were not included. The subjects were given a comprehensive account of the study and informed consent was taken from them. The sample was matched according to the age, education, etc. with the control subjects.

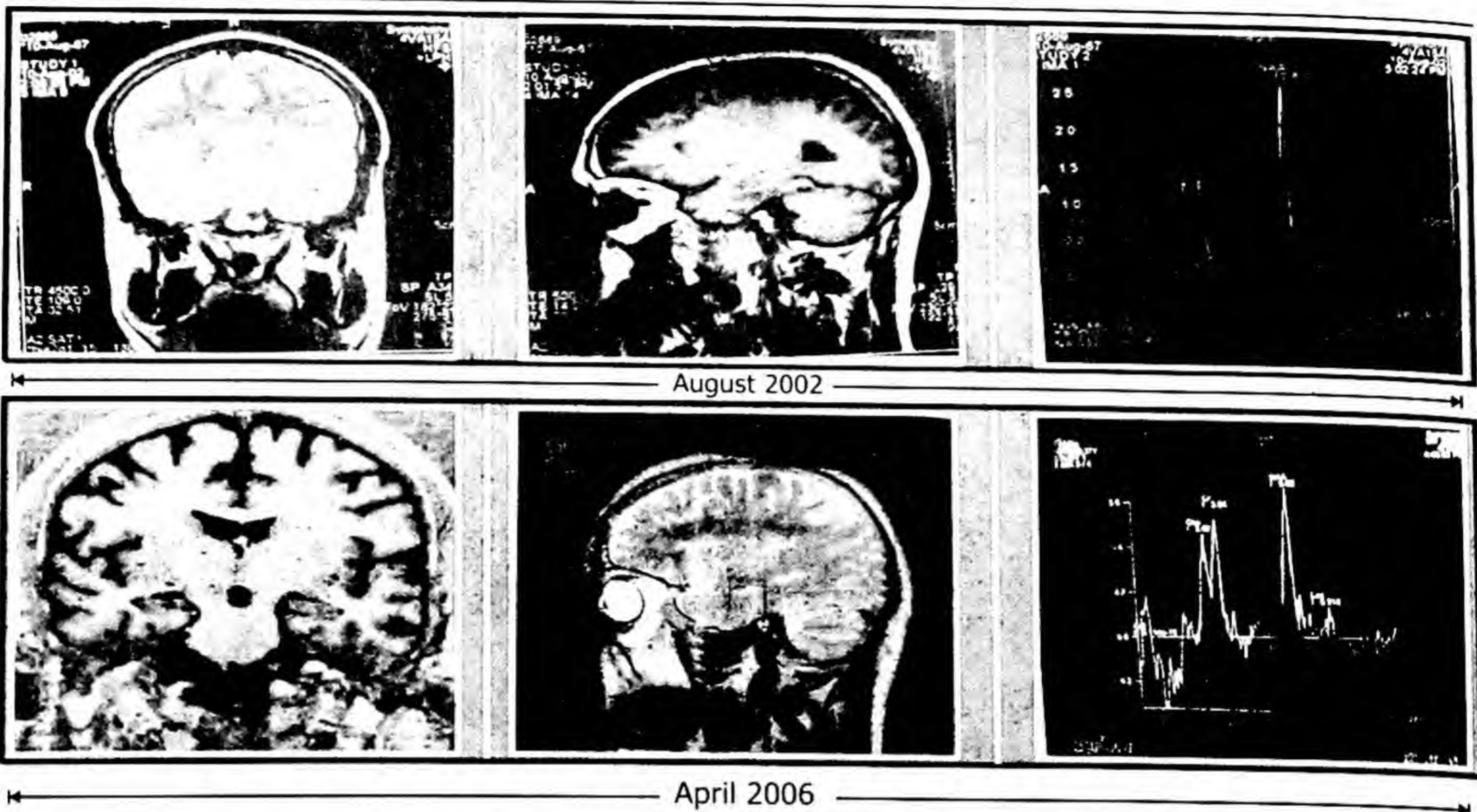
MRI Methods:

All the patients were subjected to MRI of the brain, which was, performed with a 1.5 Tesla (Siemen's symphony) and a standard head coil. Symmetric head positioning was verified by performing a short scout sequence and then the following sequence was performed. The first sequence was T-1 weighted image

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(T1W) performed in sagittal plane followed by T-2 weighted axial images (T2W) to rule out any brain abnormality. Then oblique coronal inversion recovery (IR) sequence was performed, after locating the plane of Sylvian fissure in T1W sagittal sequence. The sections were thus perpendicular to long axes of hippocampal formation. Hippocampal volumes were measured in these oblique coronal images by manual tracing method. Finally orthogonal coronal T-2 weighted images (T2W) were obtained to detect any change in signal intensity of hippocampus.

Results

The study groups did not differ with respect to socio-demographic variables. The study group comprised of two females and five males. Age ranging from 22-68 years with a mean age of 56.4 years. The average symptom duration of PTSD was 29 months (range 18-43 months). The CAPS scores for PTSD ranged from very high to low scores (91-78). The control subjects matched adequately with the study group comprised of 3 females and 4 males. The results of the preliminary investigation revealed the similar size of both hippocampi in PTSD patients as compared to the programmes.

Discussion

More severe chronic unremitting forms of PTSD, which majority of our subjects were suffering from have been reported to have an increased possibility of being associated with small hippocampal size²³. Some studies have specifically correlated with small hippocampal size with PTSD²⁴, while as others indicate that PTSD is not a

necessary outcome of it²⁵. In some reports corticosteroid induced damage to hippocampus resulting in its atrophy has been suggested to play an important role in the pathogenesis of PTSD²⁶, but other recent observations do not support corticosteroid mediated hippocampus neurotoxicity as the main causal mechanism of the neuro-psychiatric disorders²⁶. Psychological trauma damaging areas of brain as evidenced by neuro imaging needs to be researched further as a challenge to the conventional therapeutic approaches²⁷. Although majority of the studies so far had involved mostly the subjects with PTSD for a number of years, a recent hippocampal volume study on recent onset PTSD subjects has also replicated previous findings of smaller hippocampal volumes in PTSD patients, which as the authors also point out suggest, "that either smaller hippocampal volume is a predisposing factor in the development of PTSD or that damage occurs within months of trauma rather than a number of years."²⁸ More recently spectroscopic assessment of the brain structures as a better indicator of the underlying pathology than volume losses in conditions like PTSD has been suggested²⁹. We have also been carrying out the spectroscopic measurements of our PTSD subjects and the results will be reported separately. The limitation of the present study will be addressed in the final report of this longitudinal MRI study when the final results are reported in near future.

In conclusion, the present preliminary study revealed small hippocampal size in trauma survivors than those without PTSD, so future research should focus on developing strategies to prevent and reverse structural changes in brain after exposure to traumatic experiences.

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SECTION - V

They are too young to grasp the enormity of the outrage perpetrated. They are doubted by their kin and have to endure the repeated assaults on their identity. Weighed down by the shame of lost dignity, these victims of abuse are driven to the edge by the violence of their suffering.

VARYING CLINICAL PRESENTATION IN VICTIMS OF SEXUAL TRAUMATIZATION

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Sexual traumatization is a common occurrence even in oriental societies but uncommonly reported and children are the most vulnerable victims. Perpetrator is commonly intra-familial as opposed to the common belief, which entails a more frequent and longer lasting abuse. Children frequently have a more severe psycho-pathology. Our observations in the reported five cases of abuse depict a myriad of clinical presentation in case of sexual traumatization. A common presentation is that of complex PTSD with variable associated symptoms of depression, suicidality and psychotic features. Compulsive behaviour is also a common and persistent feature. Owing to social ostracization victims do not reveal these events, and when they do, they are not believed. In this there is an important caveat for health care providers when dealing with young patients, not responding to usual treatment protocols.

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Introduction

Various literary and historical sources chronicle existence of sexual traumatization in all sections of society since ancient times. Children have been the most vulnerable and commonest victims of sexual abuse. This type of trauma in children is not so uncommon as believed in oriental societies¹.

Sexually abused adolescents show a heterogeneity of consequences^{2,3}. The psychological consequence of rape have been conceptualized as Post traumatic stress disorder (PTSD). In a prospective study, Roathbaum et al (1990) found that shortly after assault, 94% of rape victims met symptomatic criteria for PTSD; 3 months after assault 47% of victims still suffered from the disorder⁴. An average of 17 years after the assault, 16.5% rape victims had PTSD⁵.

Victimization can be intrafamilial i.e. perpetrator is a family member (e.g. father, step father, uncle, grand parent etc) or extra familial that is perpetrator is a person outside the family (e.g. friend, teacher, stranger, etc.)⁶. Sexual assault is also widely prevalent in domestic settings. Studies from west found that strangers perpetrated only 22% of rapes, where as husbands and boyfriends were responsible for 19% and other relatives accounted for 38%⁷. A study from India revealed that friends/co-students perpetrated 53%, strangers 27%, relative/parent 8% of sexual assaults within a sample of school going children⁸.

Literature review on child sexual abuse perhaps provides the best information on the effect of trauma on children⁹. Sexually abused children usually have problems with fear, anxiety, depression, anger and irritability, aggression, sexually inappropriate behaviour, feelings of isolation and stigma, poor self esteem, difficulty in trusting others and substance abuse.⁹ Kendall Tackett et al (1993) review of research studies of the

effects of Child sexual abuse reported that 21% to 36 % of child sex abuse victims had no short term symptoms and that 64% to 79% of child sex abuse victims had varied patterns of symptomatology. These included in descending order of frequency, sexualized behaviors, post traumatic stress disorder, poor self esteem, anxiety, fear, depression, suicidal ideation, somatic complaints, aggressive behavior, running away and substance abuse¹⁰. McLeer et al (1988), in their study on 92 sexually abused children and adolescents, found that 54%, 42% and 10% met criteria for PTSD after they were abused respectively by natural fathers, trusted adults and strangers¹¹. It is often believed that effect of sexual abuse is more severe if perpetrator is the father or some close relative^{12,13}. Several studies also provided evidence that abuse by a family member, as compared to a stranger, leads to long-term negative consequences and high level of distress^{14,15}. A possible explanation is that abuse by a relative often implies more frequent and longer lasting abuse, which may result in more severe psychopathology^{3,16,17}. Yet few studies had reported that victims abused by an extra familial perpetrator, compared to those abused by family members, have higher level of symptomatology^{18,19}. Considerable evidence suggested that cohesive, supportive family environment might serve as a buffer against the negative effect of sexual abuse²⁰.

Usually most of the abuse victims develop symptoms, which overlap between complex PTSD and borderline personality disorder²¹. Complex PTSD, as a diagnosis, is reflective of an admixture of axis I (state) and axis II (trait) symptoms and embodies constellation of symptoms resulting from such early and adverse events²². Complex PTSD is described including the associated features and disorders of PTSD in association with an interpersonal stressor (e.g. childhood sexual abuse) and integrates the disorders of affect regulation, dissociation, somatization and altered perception of self and others²³.

A variety of risk factors for development of PTSD have been identified, in the immediate aftermath of trauma. Dissociation has been found particularly important in development of PTSD²⁴. Dissociative process which may range from normal day dreaming to the extreme of multiple personality disorder, have been found empirically to occur more frequently in victims of sexual

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abuse^{24,25}. Increased rates of dissociative phenomenon have also been found in victims of multiple rapes and in adults evidencing self-cutting behavior^{26,27,28}. Dissociation during and immediately after the traumatic event is called as peritraumatic dissociation and is thought to be a primitive coping mechanism, which attempts to protect the victim when psychologically overwhelmed by the abusive event²⁹. It has been proposed that memory disruption associated with the peritraumatic dissociation leaves the abuse victim with an inability to learn from traumatic experiences and make it difficult to bring the most informed judgment to bear when faced with a potentially dangerous situation³⁰. Thus peritraumatic dissociation may lead to a proneness to reenact the trauma³¹. Avoidant coping, which is an important feature of anxiety/ arousal response, has been identified as a risk factor for PTSD^{32,33}.

The purpose of the study is to understand the symptom profile of the patients traumatized sexually. This becomes all the more important due to lack of scientific data on one hand and indicates that the problem is not so uncommon on the other.

Case I

A 23 year old, female first in birth order with normal birth history and developmental milestones, belonging to a middle class family presented to the first author, on insistence of her parents for increased self harming tendencies and an overall change in behavior. According to the parents there was a change in behavior of the patient from last three years. Earlier she used to be very jolly, trusting, active, would take part in day-to-day house hold activities as well as her studies which she was good at. Gradually she started to become irritable, self-destructive. On asking from the patient she did not volunteer much of her personal history. A provisional diagnosis of borderline personality disorder was made. In addition to dating her for psychotherapeutic / counseling sessions, she was put on pharmacotherapy in the form of SSRI (Sertaline 25mg OD increasing to 50mg) and clozapine 50 mg for suicidal tendencies. Even at her 5th visit in the next two months no improvement was observed in the condition of the patient.

On continued interactions and counseling, the patient volunteered some information leading to suspicion of sexual trauma. As revealed subsequently, a distant relative (husband of a cousin sister) who used to visit their house after his marriage with the cousin of the patient more than three years back, and occasionally used to stay there along with his wife and some times alone. Following repeated sexually provocative remarks by him, the patient started to be fearful and vigilant, whenever he would visit their house. Once finding her alone at home he tried to rape her and following this she started with frequent palpitations, breathlessness and tremors. Without revealing any thing to her family members she would try her level best to avoid him which her parents would not appreciate as it was contrary to what she used to do earlier. She continued with these symptoms when two years back suddenly holding her arms he once again tried to sexually assault her. She became agitated, restless, and highly irritable, with a chronic sense of guilt and responsibility. Once she tried to harm herself by hitting her head against a wall mirror and injured herself leading to bleeding which she did not

reveal to any body rather locked herself in, cleaned up bloodstains from her face, clothes and floor of her room. After this event there was a complete change in her self-perception chronically feeling ashamed and not able to trust. She became more guarded, used to remain sad, her concentration in her studies decreased, became withdrawn in daily activities of home and other social interactions.

About 1 year back during the winter season in the month of January the perpetrator had visited their home again without his wife and had stayed there for the night. The patient was busy studying late in her room for next day examination, when at about 1 O'clock in the night, the perpetrator sneaked into her room and bolted it from inside. He caught hold of her hair and raped her for 5-10 minutes. According to the patient she froze and was not able to cry for help. She was horrified and felt completely helpless. Once out of a depersonalization state she broke every thing in her room and kept weeping the whole night and did not appear in her examination the next morning. Again she did not reveal this event to anybody and became severely withdrawn, her appetite decreased drastically, could not sleep, developed severe guilt feelings, worthlessness and sense of foreshortened future and nothing to live for. Her irritability, anger and self-destructive behavior increased. She used to break glass articles to cut her wrists and arms. According to the patient she would get some relief on seeing blood and sometimes would collect it in the polythene sachets and then spill it here and there. She often would relive the event when she would see clouds, barking dogs (that night it was raining and dogs were barking) hear phone rings, or whenever somebody would talk about the perpetrator and her self-harming behavior would increase. A diagnosis of posttraumatic stress disorder was made and patient was put on pharmacotherapy and psychotherapy. Besides cognitive behavior therapy the patient failed to respond to two of SSRI trials, one TCA trial and one atypical antidepressant trial over a period of seven months. This led to utter frustration not only to family members but the treating staff too. Besides regular clinical evaluations, CAPS, MADRS, CGI Scales were used to assess the treatment response. A valid consent from both the family and the patient, biweekly ECT course of six ECTs was planned. Contrary to our observation of marked improvement after ECT in such cases, sometimes just after having received the first or second ECT, this patient did not show much improvement after six ECTs and further for three weeks after that. The CAPS and other scores had not changed much. Without expecting much psychotherapy and pharmacotherapy with Sertraline 100mg, and Mirtazepine 7.5mg was continued till the next visit. To the surprise of everybody within the next three weeks there had been a dramatic overall change in the patient. Five weeks after having a course of six ECTs the patient had joined back her college, was taking part in her household activities. Her appetite, sleep, concentration had improved much. The total CAPS scores had comedown to 72. Re-experiencing and avoidance symptoms earlier getting precipitated with multiple cues had markedly diminished. Hyper arousal symptoms were also fairly under control first time after three years of continuous agony and suffering.

Case II

26 year old, female, first in birth order with normal birth history and developmental milestones, unmarried, a private corporate employee, belonging to a middle class family presented to the authors with the history of complete inability to see from last one week. 7 days back after some argument with her boss she became very irritable and took some unknown pills at her home. She went to her room and tried to sleep. At about 11p.m. her mother went to her room to ask for food. The patient asked her mother to put on the lights, which surprised her mother, as the lights were all ready on. On knowing this, she felt that she couldn't see anything.

She was rushed to a doctor who referred her to an ophthalmologist who prescribed some eye drops declaring her normal. Patient was not satisfied and consulted another (ophthalmologist) who also reassured her that there was nothing wrong with her vision. Patient could not sleep and her appetite decreased drastically. She stopped going to her office and would cry at her home for hours. She continued to visit clinician after clinician and finally one of the doctors even prescribed her black glasses and a stick and this was state in which she entered our OPD room.

On establishing proper rapport when asked about the illness patient expressed having sad mood most of the days and lack of interest in her routine day-to-day activities. These feelings had become worse following her inability to see. She dates back these feelings to her childhood and repeatedly said, "I hate this world and everyone associated with it". When asked about the reasons why she felt like this she broke down into tears. On being re-assured and calmed down she requested us to let her family members out. After this she became more cooperative and started describing her childhood experiences and described that she was very fearful of her father and that she was ashamed to be his daughter and said that he (father) has abused her sexually since 4th standard. Initially she could not understand what was happening but as she grew-up she developed severe hatred for him. She was too afraid of her father and was not able to sleep for whole nights. She would also get nightmares that directly portrayed the abuse. This went for many years and due to some family reasons she shifted to her uncle's house, where she continued to put up for 5-6 years.. During these years she had flash backs of her abuse and at school she would try to know from classmates about their fathers as to how their fathers behaved with them? She developed low self-esteem and had very few friends at school. She also recalls having repeated headaches and stomachaches. When after few years she was shifted back to her parent's house, she was terrified with mere thought of facing her father. All these years she had avoided her father in one-way or other. But to her shock her father again started abusing her. He also threatened her not to reveal it to anybody, or else she would be ruined and that no one will believe her. This kept on happening repeatedly and once she decided to tell her mother who did not respond appropriately which upset her to the extent that she tried to kill herself by cutting her wrist at one occasion and took some drug over dose twice to end her life. She

said she had repeated thoughts of death and feels that she should die rather get assaulted again and again

A diagnosis of chronic PTSD with co morbid depression with conversion (blindness) was made. On giving strong suggestion and reassurance, the conversion symptoms were reverted back and patient started seeing again instantly and threw away her black goggles and stick. Patient was put on combined pharmacotherapy and psychotherapy. Presently there are no depressive features, suicidal ideation, sleep improved, better interest in day to day routine, except that mood dysregulation, poor impulse control and avoidance symptoms have been persisting over the months.

Case III

25 year old, female, first in birth order, with normal birth history and developmental milestones, belonging to a middle class family studied up to 12th class presented to the authors accompanied by her mother with history of sad mood, disturbed sleep, loss of interest in day to day routine, loss of appetite, and decreased social interaction for last 8 months. In addition to above symptoms patient had history of recurrent hand washing and recurrent suicidal thoughts off and on. A diagnosis of major depressive disorder was made and patient put on anti-depressant treatment. On subsequent follow up there was no improvement in the condition of the patient. The dose of medication was increased with subsequent augmentation. In one of the subsequent visits, she disclosed her personal suffering dating back to her childhood.

According to patient, at the age of 5 years, when she was a student of first primary, she used to go to her aunts house for tuition from her cousin who was a graduate. One day when they were alone in the room, he abused her sexually. But the patient was not able to understand it then. Two years later at age of 7 years he again abused her and again patient was not able to understand the act. But she got extremely frightened and started to hear some voices, which used to tell her that the place is not safe for her, she should leave. With years as she grew up, these voices kept bothering her off and on.

When she was about 11-12 years old, and experienced pubertal changes she got some understanding what had happened to her at the age of 5 and 7 years. She became disturbed and irritable, developed severe anger and hatred against her cousin, whom she permanently avoided after that and stopped going to their house. She continued to get nightmares, which were mostly about the sexual trauma experienced by her. The frequency of recurrent thoughts of the event increased as the time passed and sometimes she would get vivid image of the event again and again. She also developed repetitive behavior of, cleaning and hand washing. In addition the voices described earlier, used to bother her as before.

Next year in her 10th class, she was forced to take tuition from the same person (cousin) who had assaulted her during childhood. In spite of her severe resentments and resistance, her father did not agree and she had to go to her aunt's house for tuition, She started with persistent feeling of sad mood, used to remain guarded, not able to concentrate on studies with a constant pre-occupation and

fear of repetition of the previous trauma by the perpetrator which resulted in her failure. The voices telling her about the traumatic event continued so did the perpetual feeling of never having enjoyed any moment in her life. After passing 12th class examination she was not allowed to study further by her parents. Following this she again developed sad mood, insomnia, loss of interest, episodes of crying, fatigue for about 1 year, which subsided to some extent subsequently. However, she continued with the above symptoms intermittently predominantly reliving and re-experiencing the traumatic event. After a period of 8 months, following some stressor in the family she again developed, severe sad mood, loss of interest in day to day routine, insomnia, night terrors, fearfulness, suicidal ideation, loss of appetite. The voices commenting on the traumatic event increased in frequency and in duration. She would feel, as she is in a daze and was not able to understand what has happened to her. According to her mother, at home she used to remain aloof, would not talk much, severe irritability on minor issues, often weeping.

She had not disclosed the events to anybody except for her younger sister, though the younger sister of the perpetrator had witnessed the event herself and told her mother (aunt of the victim) who in turn threatened the victim not to divulge about this "child game" by the cousin to her, to any body especially her home people as in that case, powerful magical body will lead to her petrification.

A diagnosis of chronic PTSD with psychotic features was made and patient put on pharmacotherapy and psychotherapy. The treatment is still continuing, with the patient showing improvement.

Case IV

14 year old, female student of 7th class, resident of a rural area with history of normal birth and developmental milestones, belonging to a middle class family was brought to the authors by her father with chief complaints of recurrent episodes of loss of consciousness for last six months. Detailed history and mental state examination revealed that events date back to about 2 years when she was about 12 years of age.

One evening as per the routine at about 7 pm, when it was almost dark outside, she had come out of her house to meet the call of nature. As she was walking towards the toilet located at some distance from the house, two young men suddenly caught hold of her and forced her towards the corner of the courtyard and they tore away her clothes and raped her. She fainted due to extreme fear. When she did not return after some time, family members came out to search for her. After finding her unresponsive in the yard, they took her inside. After a while on regaining consciousness amid crying and weeping she narrated the whole event to her family. The perpetrators were from her neighborhood, who had earlier been passing obscene remarks on her. Following this traumatic event the patient started behaving abnormally. At times she would talk irrelevant, started having episodes of loss of consciousness, could not sleep would be fearful, irritable. This continued for one month and patient gradually started improving by herself, with improved sleep, and mood. And was almost all right, but every now and then she was asked to report her statement about the whole traumatic event before various agencies investigating the case and

she became upset, irritable, more and more insecure. However, she did manage to go to her school till 6 months back when while going to school, the mother of one of the perpetrators along with other women of that family tried to abduct her abusing her of loose character, putting their son into trouble. Though she was being subjected to such abusive comments at school also but she still continued her studies. But following the abduction attack she started fainting again, with marked irritability, weeping spells, disinterest in her studies and day to day activity, extreme fear, disturbing dreams mostly pertaining to the sexual assault and attempt to abduction. Increased insecurity feelings had induced change in her behavior and she did not agree to go to school. The symptoms showed slight improvement with medicines and counseling. on subsequent follow up there was some improvement in her condition.

Case V

19 year old female, 3rd in birth order among 6 siblings, with normal birth history and developmental milestones, studied up to 12th class, unmarried, belonging to a lower socio-economic status, presented to us, accompanied by her elder sister with chief complaint of abnormal behavior and irritability from last one month. As per the informant (sister) the patient was apparently well one month back, when after engagement of her eldest sister, to whom she is very much attached, she gradually started with irritability, weeping spells, excessive talking, behaving like a young child, like asking age inappropriate questions, laughing inappropriately.

On detailed history and mental state examination, it was revealed that history dated back to about 3 years. According to the informant, once when the patient had visited her maternal uncle's home intending to stay there for a few days, but it was only the next morning that she came back. At that time she was severely agitated, fearful in tears, looking very sad. The patient told her family that during proceeding night she had a dream, which frightened her, and she could not sleep. She went to her uncle and told him about it. He asked her to sleep there only with him. According to the patient after that he held her close to his body and started fondling with her. Her family believed her for few days but as she started behaving more abnormally day after day they started doubting her narration. According to the informant, the patient was not able to sleep, often talk irrelevant, had crying spells, started with features of repeated hand washing. In addition these symptoms, she alleged seeing some black men who used to frighten her. She was also frightened by her own reflection in mirror and she always avoided looking into the mirror. During next 6 months she would usually have frightening dreams related to the event and would feel it happening again and again. She received psychiatric treatment and showed improvement except for repeated hand washing and some change in her way relating to events. After that event she never visited her uncle's home, never talked to him, wherever he would visit them, instead she would go away and ask her mother as for why he is visiting them. She developed severe anger and hatred towards him.

Now at present after an interval of two years, her

symptoms worsened on occasion of engagement of her elder sister. Patient was behaving like a child, irritable suddenly becoming fear full with inappropriate affect, but would become very resentful when any thing related to the event was asked. Her affect at that time would also become appropriate.

A diagnosis of chronic PTSD with psychotic features was made and patient put on pharmacotherapy.

On subsequent visits patient showed improvement, which was quite visible after a period of 3 months, when she gradually resumed normal psychosocial functioning expected from a girl of her age, however some residual symptoms were persisting, like on referring to perpetrator would induce marked distress to her. Patient is on follow up, doing well.

Discussion

Sexual abuse is not commonly reported in clinical settings, as already documented (Margoob et al 1996)³⁴. This is further testified to by the present study where most of the cases disclosed a history of sexual abuse after many sessions only, when a good therapeutic alliance had been established.

Most of the patients in our study initially presented with symptoms favoring diagnosis of depressive disorder, conversion or somatization, borderline personality disorder but as the cases unravelled, most turned out to have Complex Post Traumatic Stress Disorder (PTSD) with variable associated symptoms of depression, suicidality, dissociation, conversion, self harming behavior, and psychotic features, which in turn varied from hearing of voices to thought insertion and broadcasting. Such associated psychotic features in the form of trauma related hallucinations have already been reported³⁵. The severe psychological consequences resulting from prolonged, repeated trauma are hardly picked up by the current PTSD diagnosis. Research is going on to assess whether the complex PTSD diagnosis characterises the symptoms of prolonged trauma in a better way³⁶⁻³⁹. In a very recent study on association between trauma and hallucinations, Hardy et al. (2005) reported that 12.5% of the non-affective psychotic subjects who had experienced trauma, had similar themes and contents to their traumas; 45% had hallucinations with similar themes but not the content and 42.5% had no identifiable association between their hallucinations and previously experienced traumas and the traumas most likely to be associated with hallucinations were sexual

abuse and bullying.⁴⁰

Also some of the victims started with compulsive behavior after the traumatic event, which usually persisted well in to the adult hood. Most of the patients in our present study had developed peritraumatic dissociation. Higher rates of dissociation have been reported in victims of multiple rapes and in adults with manifestations self-cutting behaviour.²⁵⁻²⁷ In peri-traumatic dissociation, the memories of the event may get fragmented and inadequately integrated with other memories leading to impediment to accommodate to the traumatic event.⁴¹

Self harming suicidal behavior was also a common finding in this study. A history of multiple conversion symptoms, including a case of complete blindness for 4 days could also be elicited. The influence of a combination of early and subsequent stressful events in predicting later onset of psycho-pathology as expressed in current neurobiological models of PTSD may be applicable to conversion symptomatology as well.⁴² Increased psychological distress after exposure to negative life events in victims of child-hood sexual assault are explained as coping strategies,⁴³ and dimensions of attachment.⁴⁴

Majority of the patients had a loss the confidence, with a pervading sense of mistrust. In all of events, except one, the perpetrator was a close relative of the victims which combined with the prevalent socio-cultural value system may be an important reason for such events not getting revealed, as shown by our present study. In case the victims sought relatives' confidence and they were not believed, or were discouraged from revealing or even threatened because disclosing any such event would mean social ostracization of the victim and her family.

The current social fabric is centered around a joint family system especially in the rural areas of our state. This system entails increased physical proximity, overcrowding, common sleep room practice, all of which could further the risk of incest. This suggests that the incidence of incest as reported earlier also may not be as low as commonly believed.

All this has crucial implications for health care providers, who conduct clinical evaluation and treatment. The possibility of sexual trauma should be kept alive, while evaluating young patients, especially those who fail to respond to treatment protocols for no apparent reason, so as to avoid not only protracted and unfruitful therapeutic schedules, but more importantly, to prevent the crippling consequences on the life & personality of the victims.

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ADULT LIFE CONSEQUENCES OF CHILDHOOD SEXUAL ABUSE: CASE REPORT STUDY

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Sexual abuse has existed since ancient times, in all strata of every society, but has remained under reported. The few cases that do get reported are an important source of knowledge about the patterns and consequences of abuse. Following five vignettes show-case abuse experience and sequelae in the victims. The victims experienced trauma between the age of 4 to 12 years, three of them were males and four were the eldest issues in their families. In four cases the perpetrator was a relative. None of the subjects was abused by more than one perpetrator and only one was abused continuously over the years. The commonest manifestations were anxiety, depression, dissociation, somatization and obsessive traits. All these facts would hold a key value for clinicians posed with challenges of evaluating abuse patients.

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Keywords: Childhood sexual abuse, anxiety, depression, dissociation, somatization.

The detrimental effects of child sexual abuse on inter-personal, social and sexual functioning in adult life though very relevant has not been adequately researched so far even in the west. The self disclosure of adults about their abuse as children led to the initial phase of modern research into the subject with the result that over the last 10 to 15 years, child abuse has come to be widely regarded as a cause of mental problems in adult life.¹ Sexual victimization has been documented in various literary and historical sources since ancient times. It has existed in all strata of every society.² Sexual abuse of children living in their families in non-western societies is not so uncommon as is generally believed. Child sexual abuse can be defined as sexual exploitation or misuse of a child upto the age of 14 years. It also refers to sexual behaviour between a child and an adult or between two children where one of them is significantly older or uses coercion. The perpetrator and the victim may be of the same sex or opposite sexes. In the absence of any accurate data on the subject from oriental societies, study of possible association between history of sexual trauma and its late appearing psychological effects and lasting medical consequences assume a high significance. Case report of three male and two female adults with history of severe sexual abuse during childhood between the age of 4-12 years is discussed here to highlight the predisposing circumstances, variation in presentation and a need for early detection of sexually abused victims.

Case 1

Eldest of 4 issues, 29 year old single male doctor spoke about his sexual abuse while the first author

(MAM) casually talked about case reporting regarding this topic. He had been abused by his maternal uncle at the age of 3 or 4 years when he did not understand the nature of the act. He thought it is play when his uncle asked him to climb the bed. After experiencing severe pain for 2 days, he realized something wrong had happened. He avoided intimacy with his uncle and would not visit his maternal home so frequently after the episode occurred.

Eight years later, he was playing with the same person at maternal grandparents place and he decided to sleep with him having forgotten about the last episode. He woke up in the middle of the night feeling again pain in the anal region. He quickly moved out of the bed and slept with his grand mother.

Since then he has been very sensitive to the physical proximity of men around him, including his friends and even family members.

Past Medical History:

Was operated for right undescended testis at the age of 10 years. Had obsessive compulsive disorder at the age of 24 years which was preceded by an immense period of anxiety regarding relationship with a college girl.

Had the first episode of major depressive disorder at the age of 26 years which was successfully treated with an SSRI for more than 9 months and continues to be in remission.

Case-2

First issue of her parents, she had reported first time 6 years back to the first author (MAM). As a 22 year old single female who after college education had left her recently acquired job without any apparent reason. She presented with severe complaints of intrusive thoughts and preoccupations with cleanliness. She was accompanied by her younger brother, a medical student who suspected possibility of a psychiatric problem in his sister after attending few classes in psychiatry. Initial interview with the patient revealed severe distress about her blasphemous ideas and her preoccupation with excessive cleanliness and fear of contamination. Subsequent interaction with the patient revealed

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following specific details:-

At the age of 4 years, she was sexually abused by her distant uncle (father's cousin) who would frequently visit their house. She could not realize the nature of the act and started taking it as a play. At the age of 8 years, she once undressed herself completely in front of her mother and other family members while the abuser was present, who paid no apparent attention at that time but the abuse continued in privacy. The mother, as the girl revealed, had sexual relations with the perpetrator and father who would mostly be out of his home in connection with his job, had also an extra marital relationship.

The victim at around 11 years of age had once spoken to her mother about it, who looked indifferent and advised her to be cautious in future. When she reached menarche, she refused to get abused as according to the victim, by now she was well aware of the various consequences like pregnancy and moral implications of such an act.

Roughly around the same time, she began to get thoughts about sacrilege of her religion. She also would repeatedly clean her hands. She was so obsessed with excessive cleanliness that when she got a government job in an office, she gave it up on the ground of fear of getting contaminated while working among males in the office. Her brother sought psychiatric advice for her after he realized that she had a problem which needs to be discussed and managed by a psychiatrist. Her refusal to get married was bothering her family too much. After psychotherapeutic intervention and drug (sertraline) treatment, the victim agreed to marry. Initially she experienced frigidity and maladjustment but subsequently overcame it and is now a mother of two children living with her husband in a joint family set-up.

Case-3

First issue of her parents, 27 year old female doctor about a year back, is brought for psychiatric treatment with history of nervousness, outbursts of anger and suspiciousness, mostly against her parents and in-laws except her spouse in whose presence, she would remain calm and relaxed. The history revealed that she had been a very candid mixing type of a child with very good manners and excellent performance at school till the age of 8 years when she gradually started becoming irritable, impulsive and often tearful. In a small nuclear family of 2 parents and a young brother, the patient would be left alone in her home with a male domestic helper aged about 17 years as both the parents were working. After the management of the major psychiatric symptoms, a detailed psychiatric work-up revealed that the patient had been repeatedly sexually victimized by the servant from the age of six upto the age of 11 when he was fired out by the patient's mother after the patient complained against him. The lady, described herself as a very timid, indecisive type of person and attributed all her insecurity feelings and obsessive behaviour to the sexual trauma which she says she has never been able to get out of her mind. With the help of her supportive husband and psychotherapeutic intervention, she is working as a clinician but the agonizing flash back still haunt her. Post traumatic stress disorder (PTSD) is one of the common

psychiatric sequelae of sexual abuse'. Certain practice parameters are of immense help for evaluation of such cases'.

Case-4

First issue of his parents, 23 year old married male doctor from rural domicile was brought by his family, after stomach wash in medical emergency, for urgent psychiatric help following a suicidal attempt. On examination, the patient was sad and anxious with marked depressive features. First sitting was spent in crisis intervention. The subsequent two sittings revealed that the patient had been diagnosed by gastroenterologists six years back as suffering from irritable bowel syndrome and had in addition manifested symptoms of a mixture of anxiety, depression and obsessive symptoms over the past 3 years. 2 years back, he had attempted suicide almost under the identical circumstances i.e. at both the occasions, he had made sexual advances towards his young sister-in-law in the mid of the night while other family members including his mother were also sleeping in the same common sleeping room. At both the occasions, it had resulted in severe guilt and anger directed towards self, culminating in a suicidal attempt. Subsequent psychiatric interaction revealed that the patient had been sexually abused by maternal aunt from the age of 8 years to 17, when she had suddenly died at the age of about 36 years. At occasions, he had felt and also expressed an intense desire of almost obsessional nature to see his sister-in-law for a very brief period so as to apologize for his fantasized sexual feelings towards her, although he would always try to treat her as his own sister.

Case-5

A 20 year old rural male single student of B.Sc. 2nd year, was referred to psychiatric OPD after longterm medical work-up revealed no abnormality. His problem had been "inability" to concentrate on his studies, occasional headaches and gloominess. All these symptoms had started from late adolescence and according to him, seriously hampered his progress in studies as he managed to just pass his examination. His teachers thought of him as immensely talented and in fact passed all his examinations till 11th class with high grade marks. He used to get aggravation of these symptoms more when he used to visit his family at his native village, as he mostly used to reside with his father in the city where he was studying in the college. Mental status examination revealed a moderately built, well kept young male, with normal speech pattern and no disturbance in thought form or content and with normal perceptions. He reported occasional sadness and gloominess and objectively his affect was normal. He was alert, oriented, with some concentration lapses, with preserved insight. His calculations, field of knowledge and memory were absolutely normal. Symptoms were particularly severe while going to sleep at night.

He was the only male and youngest issue of a lower middle class family. His two sisters were elder to him by 10 and 5 years. The elder one was married with two children and the other died suddenly few years back of some unknown cause.

The first psychiatric interview was almost unrevealing but the subsequent interview revealed that the boy was repeatedly sexually abused by his second sister during their childhood until she died at the age of 19 years. For most of the day, he would be obsessed with sexual fantasies revolving around the two sisters, associated with lot of anger and guilt. To get rid of these obsessive thoughts, he used to indulge in various counteracting compulsive behaviours. The patient soon realized that all his physical conflicts and psychological problems originated from here.

Treatment plan for this patient was devised, besides prescribing clonazepam for initial 3 weeks. Weekly session of 30 minutes was instituted in which cognitive behaviour therapy was tried which included: (a) Imaginal desensitization, (b) Relapse prevention, (c) Social skills training and (d) Sex education. And after 12 weeks patient was treated completely and has in fact helped in identifying few other patients.

Discussion

All the five cases had very strong and persistent discomfort about their traumatic experience in childhood. All of them had manifested a variety of emotional, behavioural and somatic symptoms. Anxiety, depression, dissociation, somatization, interpersonal sensitivity and marked obsessive traits were the common emotional symptoms experienced by the victims. Similar findings have been reported from the West⁵. All the victims recounted a gradual progression of boundary violations by the perpetrator starting with tiny invasions and escalating to serious overwhelming intrusion. None of the cases had been abused by more than one perpetrator. Four out of five cases were the eldest issue of their parents. Along with these similarities in clinical presentation, there were some striking differences also. Although majority of the cases comprised of medicos probably

because of increased awareness of the subject and a fraternity feeling with the investigators their willingness to disclose the history of childhood trauma varied widely. This was in keeping with our earlier observation that childhood sexual abuse is not usually reported in our clinical settings so easily⁵. Only one case who also had been severely abused twice during eight year period, had been able to rebuff the intrusions by adopting strategy which caused the offender to refrain. Other four were continuously abused over the years resulting in different psychological and physical sequences. One more significant finding of the study is the observation that out of five cases, the perpetrator was a relative in four. It may suggest that the incidence of sexual abuse of children in Asian societies may not be so uncommon phenomenon as is usually believed. Increased physical proximity, overcrowded common sleep room practice and familial isolation patterns are likely contributing factors for sexual abuse in general and intra-familial type in particular.

Sexual abuse also leads to many physical sequelae. Approximately one third of sexual assault victims suffer some form of injury. Recent studies have reported higher frequency of abuse reporting among patients with functional gastrointestinal disorders, compared with those with structural gastrointestinal disorders⁷. One study at the University of Washington has reported abuse history in 54% of patients with irritable bowel syndrome compared with 5% with inflammatory bowel disease⁸. Enquiries with past histories of sexual victimization may be of great help to categorise subgroups of patients with irritable bowel syndrome. The role of childhood sexual trauma in contributing to adult life psychological and medical consequences remains to be classified with studies on large sample. Besides functional disorders, the impact on stress related endocrinological, gastroenterological and immunological aspects are likely to yield more conclusive results.

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SECTION - VI

The mind and body are linked inextricably ---- what troubles one cannot but have an impact on the other. The fear originating in the brain manifest as the startled gaze, the galloping heart, the sweat dampened brow.....

SOMATIZATION IN POSTTRAUMATIC STRESS DISORDER : BRIEF REPORT

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PTSD presents as a multitude of symptoms, not the least importance of which is somatic complaints. Infact, recognizing the traumatic origin of somatization of abuse - importance in view of the wasteful over utilization of medical research and manpower by such patients, as also their mismanagement. A few case study based observations from patients who had been unsuccessfully getting treated for somatic complains before their seeking of psychiatric help, go well in illuminating this fact.

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Keywords : PTSD, somatization

The close association between trauma and somatization is known since the dawn of contemporary psychiatry. Briquet (1859) ¹ concluded that hysteria is associated with extreme stress and trauma. Plenty of literature is currently available on association between PTSD and somatization²⁻⁴. In DSM IV PTSD field trials, it was found that somatization rarely occurred in the absence of severe histories of trauma.

Kashmir has been witness to one of the worst conflicts of the modern world one hundred thousand people have died, many people are reported missing. Post traumatic stress disorder is a common diagnosis in the valley's only psychiatric disease hospital. But community surveys reveal a lot of mismatch between community PTSD prevalence and people who seek help for trauma related problems from mental health professionals. One of the most important factors has been psychosomatic symptoms as commonest presentation of trauma related disorders.

Here we present a brief report of a family that used psychosomatic problems as 'cry for help' to help them process an emotionally traumatic event.

Brief Report:

A 25 year unmarried female was referred to us by ENT surgeons with unresolving tinnitus and headache of 5 yrs. A detailed psychiatric examination revealed that these symptoms started 2 months after her brother was killed and body mutilated. The patient appeared anxious and sat on edge of the chair, scanning every word carefully before the speaker. She was subjectively and objectively sad. She was pre-occupied with the thoughts of the death of her brother. She remembered killing of her brother as if it was happening in front of her. But she remembered nothing about burial. She could not sleep the whole night as she would hear him calling for help. The

sound of bullets being fired never left her since that day.. Sometimes she felt everything being repeated like a fast forward movie. She had stopped coming out of her house except for meeting doctors for the last 5 yrs.

A diagnosis of PTSD was made with the help of MINI and CAPS and patient was started on sertraline 50mg. and weekly cognitive behavioural therapy. By 6th week, the patient was very much improved. Tinnitus had gone and headaches had become milder and less frequent. But the actual saga began, when she got six, out of a total of 25, family members of her joint family for consultation. All had PTSD & were somatizing in different ways and were being treated by specialists as well as by quacks.

Discussion

PTSD was an unknown diagnostic entity among mental health professionals of Kashmir. Infact, hospital records show no case of PTSD till 1990. Since then PTSD and other trauma related disorders have assumed epidemic proportions in the Kashmir valley (Margoob et al 2001)⁶. People with mental health problems present with somatic complaints only to primary care physicians in India.⁷ 'Alexithymia',⁸ 'compulsion to repeat',⁹ lack of vocabulary to express distress in emotional terms,¹⁰ nociceptive and affective pathways coincide anatomically ¹¹ are various explanations given to explain increased somatization in trauma victims.

The brief family report further highlights the close association between trauma and somatization. There is currently a critical need amongst health professionals to understand somatization in a biopsychosocial model and decrease over utilization of already overburdened health sector, thus avoiding wasteful use of scant medical resources. From the patient's perspective its important to understand his 'cry for help' and alleviate his misery thereby improving his quality of life.

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Relation to Patient	Presenting Complaint	Most Frequented Service	Diagnosis by Psychiatrist	Treatment	Outcome
1. Mother 70 Yrs.	Blurring of Vision	Ophthalmologist	PTSD	Sertraline 50mg.	Remission
2. Niece 12 Yrs.	Headache	Neurologist	Major Depression	Sertraline	Improved
3. Brother 38 Yrs.	Backache	Orthopaedic	PTSD	Sertraline 50mg.	Remission
4. Sister 33 yrs.	Pelvic Pain Menstrual disturbance	Gynaecologist	PTSD	Sertraline 50mg.	Non Compliance
5. Brother 45 Yrs.	Easy fatigability Aches & pains	Hakim	MDD with PTSD	Sertraline 50mg.	Improved
6. Nephew 12 Yrs.	Loss of cons cousness Epigastric pain	Pir General Physician	PTSD	Mirtazapine 7.5mg.	Remission

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POST TRAUMATIC STRESS DISORDER IN PATIENTS WITH SUBSTANCE USE DISORDER: SOCIODEMOGRAPHIC AND RELATIONSHIP CHARACTERISTICS

Abdul Majid MD, Mushtaq A. Margoob MD

Dually diagnosed patients pose a unique challenge to the psychiatrists during evaluation and management. Presence of comorbidity in substance using patients is a rule rather than exception. Working on these lines an outpatient based study was carried out in Psychiatric Hospital, Srinagar, on 561 substance using patients, to work out the prevalence and patterns of comorbid PTSD. The subjects were assessed using MINI plus. Of these, 62.56% (n=351) had comorbidity, with PTSD being comorbid in 23.64% (n=83). Most of the patients were in the age group of 15-26 years (39.75%). Majority were males (63.85%) and unmarried (49.39%). Most of the patients belonged to the middle class (78.32%). Educated patients (89.16%) outnumbered illiterates (10.89%). Majority of the patients (63.85%) had witnessed multiple traumatic events. Such high rates of comorbidity suggests functional relation between these two disorders and further discourse is warranted. (JK-Practitioner 2006;13(Suppl 1):S85-S87)

Keywords: Substance use, comorbidity, PTSD.

Introduction

Interest in the study of co-occurrence between mood, anxiety disorders and substance use disorders has grown tremendously in past decade and a half. It has become clear that co-occurrence of these disorders is common and has definite impact on treatment of dually diagnosed patients. After DSM III-R (APA 1987) allowed clinicians to give multiple diagnoses when different syndromes occur together in one episode of illness, the issue of co morbidity has assumed a central stage in psychiatric records¹. Association between Posttraumatic Stress Disorder and substance use disorder has been reported in Vietnam Veterans and civilian samples. Studies also found that substance use was very common in PTSD cases in USA as were other comorbid psychiatric conditions present in these patients². Combat veterans and civilians with PTSD have demonstrated that in PTSD, alcohol abuse or dependence is the most common co morbid disorder followed by depression, other anxiety disorders, conduct disorder and non-alcohol substance abuse and dependence³.

High rates of substance abuse and PTSD were first reported in war related studies in which as many as 75% combat veterans with life time PTSD also met criteria for alcohol abuse or dependence. Among the civilian population substance use disorder have ranged from 21.6% to 43% in the patients with PTSD as compared with 8.1% to 24.7% in persons with out PTSD^{4,5}. Many of these studies have assumed that PTSD is a primary disorder and that the substances are used to self medicate symptoms⁶. Chilcoat added that drug use disorders in people who have been diagnosed as PTSD might be result of efforts on their part to self medicate masking the symptoms of PTSD⁷.

The present study was undertaken to assess the prevalence of post-traumatic stress disorder in substance

use disorder patients and examined the temporal relationship between the two psychiatric disorders.

Material and Methods

Patients registered in the out patient department of psychiatric diseases hospital, Srinagar were the source of the study. A semi-structured interview was used to record sociodemographic variables and history of drug use in patients.

Total of 561 substance use disorder patients diagnosed with the help of DSM-IV based MINI Plus were screened for a comorbid diagnosis of MINI Plus⁸ out of these 561, 351 patients had an associated psychiatric disorder. Among these dually diagnosed patients, 83 patients had PTSD as a co morbid diagnosis. The relative onset of concurrent disorders was rated on the basis of historical report during assessment.

Results:

Total of 561 substance use disorder patients were included in the study, out of which 62.56% (n=351) patients had an associated psychiatric disorder. Concurrent PTSD as dual diagnosis was present in 23.64% (n=83) patients.

The age of cases ranged from 19-55 years with mean age 27.17 years \pm S.D \pm 5.23. The maximum number of patients 39.75% (n=33) belonged to 19-26 age group followed by 30.12% (n=25) in 27-34 years of age group. This study was dominated by male sex as there were 63.85% (n=53) males and 36.14% (n=30) females. Most of the cases were unmarried 49.39% (n=41) followed by married 39.75% (n=33) and 10.83% (n=) were divorcees or widowers. The middle class constituted most of our patient population i.e 78.32% (n=65). Graduates and postgraduates constituted 48.84% (n=41) followed by matriculates 39.75% (n=33) and illiterates constituted only 10.84% (n=9) of our dually diagnosed Substance Use Disorder and PTSD patients. 50.60% (n=42) were government employees followed by 39.75% (n=33) Laborers/ unemployed and 9.63% (n=8) were students.

Most of the patients 63.85% (n=53) had either experienced or witnessed multiple traumatic events

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Sample characteristics of substance use disorder patients with PTSD as co morbid diagnosis

Sample characteristics of substance use disorder patients with PTSD as co morbid diagnosis								
Age in years			Gender			Residential status		
	Pts.	%age		Pts.	%age	Pts.	%age	
19-26	33	39.75	Male	53	63.85	Rural	61	
27-34	25	30.12						73.49
35-42	13	15.66						
43-50	4	4.80	Female	30	36.14	Urban	22	
> 50	8	9.6%						26.50
Marital status			Socioeconomic status			Occupation		
	Pts.	%age		Pts.	%age		Pts.	%age
Married	33	39.75	UC	13	15.66	Employed	42	50.60
Unmarried	41	49.39	MC	65	78.30	Unemployed	33	39.75
Divorcee	5	6.02	LC	5	6.02	Students	08	9.63
Education			Precipitating factors			Drugs used		
	Pts.	%age		Pts.	%age		Pts.	%age
Illetrate	9	10.84	Multiple events	53	63.85	Bzp	21	25.30
Matric	33	39.75	Single event	30	36.14	Bzp+ Op+ Can	33	39.75
Graduates	29	34.39				Opioids	25	30.12
Postgraduates	12	14.45				alcohol	4	4.8

qualifying for the diagnosis of PTSD as compared to 36.14% (n=30) patients who had exposure to one traumatic event. Other parameters are given in the table.

Discussion:

The present study assessed the prevalence of post-traumatic stress disorder in substance use disorder patients, their sociodemographic variables and relationship between the two disorders. 62.56% (n=351) patients had an associated psychiatric disorder and concurrent PTSD as dual diagnosis was present in 23.64% (n=83) patients. These figures are supported by studies carried out by Reiger 1984⁹ and NCS 1991⁴ in which the odds ratio for Substance Use Disorder in men was 2-3 and 2.5-4.5 for women suffering from PTSD. Using data from ECA study 1981, Cottler observed that cocaine/opiate users were most likely to report PTSD qualifying traumatic events (43%) and over all Substance Use disorder was more common in these PTSD patients as compared to the rest¹. In our study 39.75% (n=33) belonged to the 19-26 age group which are in agreement with the figures seen Hellen E. Ross et al¹⁰. Male sex 63.85% (n=53), unmarried 49.39% (n=41), from middle class family 78.32% (n=65), 50.60% (n=42), government employees and literates 89.15% (n=74) dominated our dually diagnosed Substance Use Disorder and PTSD patient sample. This is consistent with findings of Khantzian, et al¹¹. However keeping in view the over all literacy rate of this part of the world and earlier studies by Margoob et al^{12,13} literacy rate and occupational status are not consistent with the socio-demographic distribution of the community as are earlier results. This could be due to lack of knowledge. Most of the patients are still unaware of PTSD symptoms and continue taking drugs/self-medication themselves or prescribed by non-psychiatric experts as treatment of these somatic symptoms resulting in addiction subsequently. In addition most of the patients were actually referred from private clinics in contrast to earlier studies, which were carried out in psychiatric

diseases hospital where patients from lower socio economic background seek treatment.

The study revealed that most of the patients 63.85% (n=53) had either experienced or witnessed multiple traumatic events qualifying for the diagnosis of PTSD as compared to 36.14% (n=30) patients who also had history of one event may be due to persistent disturbed conditions in this part of the world. Most of the patients 39.75% (n=33) used multiple drug combinations like benzodiazepines, opioids and cannabis, followed by 30.12 % (n=25) opioid which is supported by our earlier study results¹⁴. However alcohol was least used by these patients 4.8% (n=4) in contrast to the studies from rest of the world, possibly due to the fact that alcohol is not a socially approved beverage in this part of the world and its relatively lesser availability.

So the high rates of co morbidity between Substance Use Disorder and PTSD in our study suggest that these disorders are functionally related to each other. Bremners self-medication model suggested that patients report CNS depressants like alcohol, opioids and benzodiazepines lead to instant symptom relief for a short duration¹⁵. In addition clinical evidence suggests that the choice of substance use (CNS depressants vs CNS stimulants) may stem from a particular constellation of PTSD symptoms that the patients experience¹⁶.

Jacobsons review paper also establishes stress as a contributing factor for future development of substance use. He suggested that in PTSD, sensitization makes the patient more sensitive to the stressor and in substance abuse sensitization makes the patient more sensitive to drugs. In addition in PTSD, the individual is conditioned to an aversive stimulus, the stressor, in drug abuse the same individual is conditioned to the rewarding stimulus, the drug. Thus showing that PTSD and substance use share the conditioning and sensitization model which is mediated by the amygdala, the center mediating fear, emotions and addiction^{17,18}. In fact four decades of clinical work involving substance use disorder patients has led

Khantzian to conclude that suffering is the heart of addiction".

Conclusion:

Our study confirms that co morbidity between substance use disorders and post traumatic stress disorder is common and symptoms of dually diagnosed patients tend to be more severe and refractory to treatment. Our study also revealed that most of our dually diagnosed patients were young males and females from middle class and most of the patients had experienced multiple traumatic events resulting mostly in the use of

combination drugs.

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SECTION - VII

In the fatalistic orient, faith is often the reason for resilience, for it fosters acceptance of the trauma as an act of providence.

PIR, FAQIR AND PSYCHOTHERAPIST: THEIR ROLE IN PSYCHOSOCIAL INTERVENTION OF TRAUMA

Huda Mushtaq, M.A.; and Mushtaq A. Margoob, M.D.

In spite of the advances made in various fields of medical science, traditional healing practices continue to be used widely all over the world especially in Africa and South Asia. Spiritual healing has got a pivotal role as far as mental health is concerned because traditional faith healers are usually the first contact in the event of a sickness. A common experience of Sufi mystic and psychiatrist practicing psychotherapy is the balance between the inner and outer life. The dawn of the new century has also seen a significant increase in realization in the West that spiritual factors are an integral part of health and well being. It is important for mental health care professionals to be aware and sensitive to spiritual dimensions of mental health. Taking a lead from an article by Late Prof. E. Hoch, written 30 years back on the subject of importance of traditional healing practices, the present study describes the change over the years and the role of spiritual healers (pirs, faqirs) in chronic mass trauma interventions in Kashmir. (JK-Practitioner 2006;13(Suppl 1):S89-S93.

Keywords : Spiritual healing, psychotherapy, trauma

Before describing the modus operandi of Pir Faqir healing practices, a brief account of spirituality is inevitable because the essence of their intervention is assumed to be based on it. The dawn of the new century has witnessed a significant increase in coverage of spirituality in the media, work place, education and socio political circles.¹ Spirituality has also become more visible in health care with increased realization in the west that spiritual factors are an integral part of health and well being.² In fact, it has always been difficult to separate mental health from spirituality in oriental societies. The reference point for traumatic stress, therefore, need not always revolve around western theories alone. A rich body of knowledge and wisdom exists in ancient texts of oriental societies. A major resource already exists in terms of people who practice or advocate it, and populations that believe in it and follow it.

A recent study assessing the implications of psychiatric pluralism for WHO research on mental health disorders examined patients in three forms of therapy for mental illness in south India: Ayurvedic (indigenous), allopathic (western) and religious healing, and reported that patients in all three therapeutic systems showed improvement after follow-up evaluation, and that several patients had radically divergent experiences with each of the three therapies - each therapy was helpful to some and ineffective for others.³

In view of the new insights gained through recent studies²⁻⁴, the WHO's 1979 follow-up study results on severe mental disorders are being reinterpreted in view of containing very little description of local culture, and tendency to apply western common sense to the practices of developing countries. The study had lamented, 'ignorance about the nature of mental illness and

misconceptions and superstitious beliefs about mental illnesses which lead people to seek help from faith healers'⁴.

Subsequently, however, WHO sponsored follow-up studies found better outcome for severe mental disorders in developing country centres, as such places have a greater availability of diverse forms of therapy when compared with the developed countries. Psychotherapy implies a change of perspective with the objective to understand emotional problems, change coping skills and to restructure the personality.⁵ Application of the techniques of psychotherapy commonly practiced in the west may be difficult to employ in their absolute form in South Asian patients. Regional notions and healing practices including religion,^{6,7} yoga⁸⁻¹² and meditation¹³ are reported to be helpful in managing a number of psychiatric problems, social and spiritual afflictions and are now being strongly recommended even at the advanced centres of the U.S.A.¹⁴

Due to the close relationship of the spiritual aspects to health in general and mental health in particular, it is important for mental health professional to be aware and sensitive to spiritual dimension of mental health.¹⁵

Recent surveys show that approximately 80% of Americans believe in the connection between healing and spirituality and there is a rekindling of interest in, and focus on the spiritual dimension in medical schools.¹⁶ Dr. Afzal Javed (U.K) in a recent International Congress presentation explicitly stressed on the need to reconsider the place of religion and spirituality in psychiatry. He stressed that "despite the secularizing influence of modern society, the presence of religiosity remains substantial and reports suggest the positive impact of religious beliefs and practices on day to day functioning and mental well being"¹⁸. Suggestions that spirituality and religion can be powerful tools to boost resilience, not only for man made stressors but even in the face of calamities and catastrophes, are getting strongly substantiated. A more recent study on the inhabitants of three different population centers in Israel, including a suburb of Telaaviv, a settlement in the Western Bank and a settlement cluster in the Gaza Strip exposed to various

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“Submission” an art work by Masood Hussain, a renowned artist of Kashmir- Depicts a praying woman’s head and hands, peeping through a beautiful laatticed wodden window ravaged by time

forms of violence clearly demonstrated that even under extreme conditions deeply held belief systems influencing life, impart significant resilience against developing stress related disorders. "Religiousness combined with common ideological convictions and social cohesion was associated with substantial resilience as compared to a secular metropolitan urban population", conclude the researchers¹⁹.

Spirituality, though often used interchangeably with religion, goes, beyond a specific religious affiliation²⁰⁻²¹. Religion and spirituality both offer a sense of meaning and purpose in life but spirituality transcends organized institution of religion, in relationship between the person and a Higher Being^{21,22}.

In almost all of South Asia and Africa, traditional religious healing practices are widely prevalent and people consult indigenous spiritual therapists first, in the event of a sickness²³. The spiritualism in these countries is recognized as a way of life with eternal joy and bliss beyond the realm of sensual pleasures²⁴. Kashmir has been the favorite abode of mystics for hundreds of years. Sufi mystic and psychotherapist share in the community the experience of balance between inner and outer life. In view of the prevailing turbulent conditions in Kashmir, a reappraisal of the conventional/psychotherapeutic methods practiced here during 1970's (as earlier reported by the eminent European psychiatrist late Prof. E.M. Hoch,²⁵ the then head of department of psychiatry Govt. Medical College Srinagar and Medical Superintendent of the sole psychiatric diseases hospital of Kashmir), would be a worthwhile exercise. The present study therefore reports on the previous practices of the local traditional healers (during 70's), the common beliefs concerning the nature and origin of mental disorders in Kashmir, and the change over past 30 years. This includes items relating to their family background, sociodemographic variables, personal history and characteristics, the training recommended and detailed account of their techniques for different types of health and other problems.

In Kashmir, the Muslim community forms a majority of the population; some families have the hereditary status of being a Pir. The Pir, known as a respected wise man, prominent representative of religion and spiritual guide who not only has power to drive out evil spirits and to cure physical and mental illnesses, but also to 'divine' the hidden causes of various misfortunes including litigation, theft, and the wisdom to give appropriate advice in crucial life situations. Although not all the men born in a Pir family actually function in their traditional role, and are engaged in different professions, but they still enjoy a special respect. A person with no hereditary status, who has served an apprenticeship under a recognized Pir, can also attain the status of Pir and would then transmit it to his descendents. The training and initiation into the carefully guarded secrets of their practices is handed down from father to son or from teacher (Pir) to disciple (Murid). No intoxicants are used for achieving trance states. A Pir usually dresses in a sober, traditional way which earns respect. The techniques used by Pir are making passes, breathing air on to the patients, dispensing of Tawiz

(amulets), Pills or Holy water.

In contrast to the Pir, a Faqir does not have any hereditary status, may belong to any religion, and is a self styled healer, often eccentrically dressed or rather undressed and adorned by bizarre attributes, and makes frequent use of intoxicants, especially cannabis in various forms. Fumigations, rhythmical singings, dancing to the tunes of drums, sometimes accompany the healing sessions. Sometimes an imposter can take on the role of a Pir or Faqir. In some situations, a chronic mental disorder patients is taken as a Faqir and lot of people visit him for healing.

Trivedi and Sethi, about 25 years back in their study on 10 prominent faith healers of Lucknow, reported that most of them belonged to lower economic class, where extroverted, less intelligent and more assertive. Most of them had undergone training but had not been able to demonstrate their ability²³.

With a significant improvement in the education level and socioeconomic status like any other place over the past thirty years, the stigma attached to psychiatric disorders has decreased. The turmoil of past 15 years in Kashmir has led to a phenomenal increase in psychosocial problems. The increased psychoeducation through media, government health services and NGOs has led to an increased demand for psychotherapeutic and medical treatment by mental health professionals on one hand, while on the other continued death and destruction has reinforced the faith in God and coping with religion resulting in a massive rush to faith healers, shrines and other religious places. There has been significant change in the percentage of patients visiting faith-healers before they seek psychiatric help. In 1996, 73% of the total patients would visit a faith-healer before seeking psychiatric help and more-so in rural areas (87% in rural and 59% in urban area), while as in 2005, 68.5% (84% in rural and 53% in urban) of the patients seeking treatment visit faith-healers first. Because of these factors the trend to compete and cooperate, to certain extent between mental health professionals and the indigenous spiritual healers is continuing the same way as three decades back. In majority of cases, without any ill feeling on either side and in a spirit of peaceful co-existence, the traffic continues to run both ways. Patients under the treatment of mental health professionals, wishing to make use of the local resources, are hardly objected to except for instructions not to approach an imposter using unethical measures like branding etc., or discontinue the prescribed treatment. The indigenous healers in turn continue to refer cases which they consider beyond their scope to mental health professionals. Although the referral of patients from faith-healers is not very large, but it is still higher than the percentage of patients referred from other medical professionals. In 1996, from a sample of 912 patients seeking treatment at psychiatric disease hospital, 81.6% were referred by the old patients, 13.4% by faith healers and only 5% by medical practitioners, while as in 2005, from a sample of 1010 patients seeking treatment at psychiatric disease hospital, 76.17% were referred by old patients, 14.12% by faith-healers and 9.7% by the other

medical professionals. Though there is an increase in the number of patients referred by the other medical professionals, the number of patients referred from the faith healers shows no significant change.

Another tendency that has decreased considerably but still exists, is the one in which some chronic cases of mental disorders may receive high respect and veneration as "Faquir" or "Darvish" and get approved as healers, especially by community associates from the similar sociocultural background with a possible huge identification with such a healer. But then, a similar kind of situation can also arise when unqualified people indulge in psychotherapeutic interventions especially in crises or disaster situations. The process of digging in like this results in more harm than help.

The indigenous healer usually achieves his aim in a single session, except if the person becomes a regular devotee or apprentice, while the psychotherapist usually works for a longer period which 30 years back would probably mean many years. [Even though cognitive behaviour therapy and other recent techniques focus more on the present life, the faith healer has always been using techniques so as to complete the intervention in a relatively much shorter period.] The Pir and Faquir continues to perform his practice mostly in public either in a family or in a wider gathering. Psychotherapy on the other hand continues to rely on seclusion of the therapist with his patients, discouraging contact of family members. The strategy of traditional healers is drawn on aspects of healing that are viable alternatives in societies where advanced technology and sophisticated understanding of disease is lacking. The traditional spiritual healers many of whom are part of the clergy, are intimately involved with their patients and in the community are highly respected for their skills and sharing the results of their work.

For many people, the first person they seek out during times of crisis and need is a Pir, or a Faquir, or some other religious clergy person. Now a days many people, even in the West would better seek help from the clergy than from mental health professionals and are often more satisfied with the assistance they receive from clergy²⁸. Present research has revealed that spiritual programmes can be very useful in the event of traumatic response²⁹, particularly in a mass trauma or a disaster situation. Encouraging collaboration with traditional healers has been specifically stressed, as a working alliance between traditional healers and allopathic practitioners can help to overcome barriers to treatment acceptance and delivery^{30,31}. This has also been strongly stressed by Russell De Souza and Bruce Singh in the light of their experience of working within the disaster areas of Srilanka following the Tsunami, who concluded, "Thus in these resource poor areas, the collaboration of medical and mental health professionals with appropriate traditional resources such as faith healers, pastoral care clergy and similar is seen as an important and necessary engagement and an opportunity in terms of care, provision of meaning and general community support"³²

This intervention, although like most other management modalities warrants a caution about its

limitations. Faith healing, for most of its practitioners is a source of earning their livelihood. There is always a strong possibility of exploitation and likelihood of the whole exercise getting converted into a brisk business or unbridled trade for faith healers, once it gets inadvertently patronized by a qualified mental health professional or a credible organization. Incidentally, the most popular local newspaper, Greater Kashmir, carries a write-up on this topic (April 9, 2006) by a well known writer, Aijaz-ul-Haque, which reads "Peer-Mureed duo makes an interesting combination in the Oriental folklore and Eastern literature. It's been once revered as a sacred bond between the one in quest of truth and the other bearing torch. But, as the years rolled by, pure spiritual association got smeared with material interests and thus entered the element of exploitation which the famous Eastern poet, Iqbal, refers to in a small poem titled 'Baaghi Mureed (rebellious disciple)', strikes at the root of a relationship based on foul play and exploitation, which Mureed(disciple) can't bear anymore

Mujh Ko To Muyassar Nahi Mitti Ka Diya Bhi

(I can't afford even a lamp of clay)

Ghar Peer Ka Bijli Kay Chiragoon Say Hai Roshan

(But look how does the mansion of my priest dazzle with the light of luxury)

Had spiritual knowledge not been maneuvered for personal ends, who knows world would have been better off. Peer-Mureed alliance so nonchalantly toyed with by mavericks, would have been a reference point of respect had it retained the essence it once had. Though there may be a few examples around with the same nostalgic touch, but how many? By and large the company of guide and the disciple can easily be renamed as a queer partnership between a naïve follower and a shrewd instructor. Dynastic rule, theocracy, priesthood and all such fanatic expressions of a base desire played havoc. Suppression of ideas, blind following, unquestioning obedience of some fallible and may be iniquitous souls was willfully accepted as the order of the day. The institutions of an emotional mind wash got encouraged, where a disciple could not dare to put his oil lamp of clay against the flashlights of affluence, his guide enjoys the daze of. Religion, we believe, has humanized and will always humanize the rawness of flesh and blood. But, let us not forget faith has nothing to do with pedigree. Knowledge, spiritual or material, is an intellectual property not to be inherited or copyrighted but to be cultivated, something not to be bought and sold, but to be taught and learnt."³³

One more caution to be taken is against imposters in the name of spiritual faith healing, who indulge in various injurious and unethical practices, like branding of psychiatric patients (possession states including peritraumatic dissociation, which is prevalent in disaster situations) with hot iron rods. To prevent such unacceptable activities, proper advance homework including preparation of well formulated psycho education material, in the form of pamphlets and handouts for disciples can be helpful

We feel that an appropriate way to end this discussion is to close it with the late Prof. Ernie Hoch's enlightening

words: "in developing countries under the influence of rapid social and cultural transportation one frequently finds confusion in this respect (of the fit between popular beliefs and attitudes with regard to mental illness, the symptomatology of mental disorders actually prevalent and the healing practices available for them) old sick roles and healing practices have lost their meaning and attraction while at the same time the western methods already introduced may not be adequate as yet for level of

emancipation, and the still archaic symptomatology of those who try to make use of them. The therapist working in this situation is therefore forced to abandon all dogmatic rigidity and to find new approaches relying on that which is fundamental to all healing. This, however, is what he basically shares with his indigenous counterpart, whom then he will no longer consider as an outdated absurdity, nor as a dangerous rival, but as a respected colleague with whom he feels at one".

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A STUDY OF BURNOUT AMONG CLINICIANS AS CAREGIVERS IN A CHRONIC MASS TRAUMA SITUATION

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Working as a clinician in a conflict zone confronts them with unremitting demands on their time and skills, which in light of excessive workload, inadequate staff support and unsatisfactory returns results in a lot of frustration and compromised patient care. A survey was conducted on 185 clinicians to assess the burn out level amongst them. Maslach Burnout Inventory (MBI) with subscales of Emotional Exhaustion (EE), Depersonalization (DP) and Personal Accomplishment (PA) were used to assess the burnout levels in the subjects. The clinicians selected were from primary care centres (37.29%) and secondary/tertiary care centres (62.71%). Most of the respondents (49.20%) were in the age group of 26-35 years. Males (83.25%) outnumbered females (16.75%), and most of the respondents (62.7%) had less than 9 years of experience. Using MBI scale it was found that 56.22% had a low score on EE and 66.48% had low scores on DP sub scale, whereas 41.08% had high scores on PA subscale indicating low degree of burnout in the overall sample. This study, however had a major limitation in the fact that the senior and junior residents, who usually bear the brunt of emergency patient care, had only a little representation in the study. (JK-Practitioner 2006;13(Suppl 1):S94-S97.

Keywords : Clinicians, burnout, Maslach Burnout Inventory, emotional exhaustion, depersonalization, personal accomplishment.

Introduction:

We live in an age of constant stress: further under the prevailing circumstances, doctors face unremitting demands on their time, attention and skills. In view of a considerable international evidence that doctors are suffering from high level of stress, the past decade has seen an increased concern over the health of doctors. Besides an excessive work load, inadequate staff strength, poor academic and research work culture, poor salaries, indifferent administration, bureaucratic red tapism, unwarranted political interference cum political bossism and thoughtless reservation quotas are some of the several disincentives that discourage a talented competent medical professionals in the government sector. It is already documented in literature that psychological stress or trauma can cause structural damage in organ systems resulting in serious disability or even death. The inherent nature of medical practice in which doctors are expected to function competently, work hard and relieve suffering and distress, imposes a heavy strain on them¹. Those involved in direct patient care especially interns and registrars have the added stress of sleep deprivation², uncertainty about their own role performances³, social isolation⁴ and increased responsibility⁵. They share with their parents the insecurity of not being fully qualified⁶. The high rates of depression, suicide^{7,8}, drug and alcohol abuse and psychiatric illness⁹, marital disharmony and high divorce

rates¹⁰, bear testimony to the stressful nature of their occupation.

Life and death are the daily issues faced by the staff of intensive care units, post operative wards, trauma management units, and emergency and observation wards. For a patient and his/her family, a stay in the ICU is a stressful experience of the greatest magnitude, warranting constant honest explanation, information and reassurance. These demands combined with administrative and bureaucratic frustrations frequently lead to medical staff burnout¹¹. There is a dearth of reports on the reactions or behavior of medical staff in mass emergency situations¹². It is apparent that disaster situations completely disrupt their usual routine, increase responsibility and excessive demands made on them. Despite a façade of detachment in an emotionally charged and extremely demanding situation, it should not be assumed that doctors are immune to the emotional impact of the disaster¹². This facade may hide the coping mechanism which typically include denial and detachment. Feelings of fear and vulnerability may remain unaddressed in a medical culture that does not seem to permit their expression¹³. This detachment may not only be from the patient but from other staff, and more importantly the doctors themselves¹⁴.

In our study in a situation of mass trauma of more than 15 years duration we tried to assess daily stresses, doctors as medical caregivers are confronted with and their effect on their daily routine activities. We tried to assess if they observed a change in their personality and evaluate whether they themselves experienced any traumatic event.

Material and methods:

The present study was undertaken on doctors working in different primary, secondary and tertiary care health institutions at different positions with varying period of experience.

Three different questionnaires were used to assess

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AGE:	No	%
AGE	91	49.2
26-35	53	28.65
36-45	33	17.83
46-55	8	4.34
56-65		

SEX:	No.	%
SEX	154	83.25
Males	31	16.75
Females		

EXPERIENCE:	No.	%
EXPERIENCE (years)	116	62.7
0 to 9	29	15.67
10 to 19	37	16.76
20 to 29	9	4.87
>30		

SPECIALTYWISE SAMPLE PROFILE:

DESIGNATION	No.	%
Assistant Surgeon	69	37.29
Senior Resident	67	36.19
Faculty	49	26.52]

SPECIALITY	No	%
Anaesthesia	3	1.62
Medicine	53	28.66
Surgery	31	16.7
Chest Diseases	2	1.08
Cardiology	1	0.54
Oncology	1	0.54
Psychiatry	2	1.08
ENT	6	3.26
Ophthalmology	4	2.17
Health Deptt	65	35.15
Dermatology	4	2.17
Orthopaedics	2	1.08
Gynaecology	4	2.17
Anatomy	1	0.54
Pathology	1	0.54
Radiology	1	0.54
Urology	1	0.54
Retired	3	1.62

MASLACH BURNOUT INVENTORY SCORE RANGE

Total Sample : 185			
MBI Subscales	LOW	AVERAGE	HIGH
EE	0-16	17-26	≥27
DP	0-6	7 to 12	≥13
PA	≥39	32-38	0-31

SPECIALITY SUBGROUPS:**1) Surgeons and Allied Specialties**

MBI Subscales	LOW	AVERAGE	HIGH
EE	0-16	17-25	27-48
DP	0-6	7-12	13-14
PA	39-42	32-38	1-31

2) Assistant Surgeons and Allied Specialties

MBI Subscales	LOW	AVERAGE	HIGH
EE	0-16	17-26	27-39
DP	0-6	7-12	13-21
PA	39-48	32-38	12-31

3) Medicine and Allied Specialties

MBI Subscales	LOW	AVERAGE	HIGH
EE	0-16	17-26	27-45
DP	0-6	7-12	14-22
PA	40-46	32-38	0-31

SEVERITY OF BURNOUT IN TOTAL SAMPLE

MBI Subscales	LOW	AVERAGE	HIGH
EE	104(56.22%)	32(17.29)	49(26.48%)
DP	123(66.48%)	44(23.70)	18(9.72%)
PA	58(31.35%)	51(27.56)	75(41.08%)

SEVERITY OF BURNOUT IN DIFFERENT SPECIALITIES**1) Surgeons and Allied Specialties**

MBI Subscales	LOW	AVERAGE	HIGH
EE	27(54%)	9(18%)	14(28%)
DP	36(72%)	9(18%)	5(10%)
PA	17(34%)	10(20%)	23(46%)

2) Medicine and Allied Specialties

MBI Subscales	LOW	AVERAGE	HIGH
EE	33(47.14%)	16(28.85%)	21(30%)
DP	44(82.85%)	19(27.24%)	7(10%)
PA	19(27.24%)	23(32.90%)	28(40%)

3) Assistant Surgeons and Allied Specialties in Rural Setup

MBI Subscales	LOW	AVERAGE	HIGH
EE	47(72.30%)	12(18.46%)	6(9.23%)
DP	46(70.76%)	14(21.53%)	5(7.7%)
PA	17(26.15%)	19(24.24%)	29(44.62%)

MEAN AND STANDARD DEVIATION FOR MBI SUBSCALE

Total Sample : 185

	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
Mean	16.87	5.53	33.15
Standard Deviation	11.25	4.98	9.24

MEAN AND STANDARD DEVIATION FOR SPECIALTY SUBGROUPS**1) Surgeons and Allied Specialties (n=50)**

	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
Mean	17.92	4.86	33.8
Standard Deviation	12.17	4.43	10.82

2) Medicine and Allied Specialties (n=70)

	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
Mean	14.12	5.1	33.07
Standard Deviation	8.96	4.7	8.48

3) Assistant Surgeons and Allied Specialties

	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
Mean	19.07	6.34	32.37
Standard Deviation	12.1	5.46	9.36

different aspects of stress in daily working conditions. The questionnaire (I) assessed daily stresses and the effects these produce on the way subjects regard their work and their dealing with patients. Second questionnaire (II) [IPDE ICD-10 module screening] evaluated the type of person the subjects have been during past five years. The third questionnaire (III) [life events checklist] helped to evaluate whether the subjects studied had experienced any traumatic event involving threatened death or actual death, or serious injury to themselves or others and whether it produced intense fear, helplessness or horror in them. In addition to assessing the consequences of such trauma detailed instructions were provided to the respondents to fill up and respond to questions in the questionnaire.

Maslach Burnout Inventory (MBI) with subscales of emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA) were used to assess the burnout in subjects.

Observations

Sample characteristics:-

A total of 185 doctors were included in the study out of which 83.25 % (n=154) were males and 16.75% (n=31) were females. Most of the respondents in our study belonged to 26-35 year age interval, that is 49.20% (n=91) followed by 28.65 % (n=53) in 36-45 year age group. 62.70% (n=116) had a post internship experience of up to 9 years as clinicians followed by 15.67 % (n=29) with 10-19 years of clinical experience.

37.29% (n=69) were assistant surgeons working in primary care centers in rural areas followed by 36.19% (n=67) as senior residents / registrars and 26.52% (n=49) as faculty in secondary or tertiary care centers. Most of the cases 35.15% (n=65) were working in health department, followed by 28.66% (n=53) in Department of Medicine, 16.70% (n=31) in department of surgery and so on. 34.05 % (n=63) were working at different positions in Sher-i-Kashmir Institute of Medical Sciences (SKIMS) followed by 25.94% (n=48) in Government Medical College, Srinagar and Associated Hospitals, 31.38% in health department in rural areas and so on.

Discussion:

In most health institutions the staff, particularly doctors face extreme stress in the form of excessive work load, poor staff strength, less than expected salary, in adequate security, threat to their lives, particularly in a place like ours which has been suffering from turmoil since last 1 ½ decade. Most medical curricula for medical students, interneers, registrars, faculty members and doctors working in peripheral health centers appear to ignore their personal needs and at the same time expect them to be caring and dedicated professionals. In fact, recently some researchers have started creating awareness in different medical schools in USA to recognize stress in themselves and ways to cope with them.

Unanticipated deaths in casualty or emergency departments frequently were encountered by interns, residents, senior residents, junior assistant surgeons when they could not avail the experience of their senior and experienced clinicians and teachers. In fact they described this as the hardest time to deal with because of chaos

involved in the resuscitation efforts, anxiety associated with failure, inexperience to develop rapport with the grief stricken family and non availability of standard and life saving equipments. These findings have been supported by Berman et al in their studies¹³.

The unsuccessful resuscitative measures lead to feelings of guilt, in adequacy and failure as were reported by the doctors in our study which, combined with difficulties in telling relatives that a member of the family had died, added to the stress and prevented the doctor from providing necessary care to them. These findings are in agreement with Schrier et al (1979).

Burnout is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feeling. It is not viewed as a dichotomous variable, which is either present or absent¹⁴.

- A high degree of Burnout is reflected in high scores on the Emotional Exhaustion (EE) and Depersonalization (DP) subscales and in low scores on the Personal Accomplishment (PA) subscale.
- An average degree of burn out is reflected in average scores on all the three subscales
- A Low degree of burnout is reflected in low scores on Emotional Exhaustion (EE) and Depersonalization (DP) and in high scores on the Personal Accomplishment (PA) subscale.

In the surgery and allied specialties, 54% sample had low scores of EE and 72 % had low scores on DP subscales, while 46% had high scores on PA subscale, thereby indicating low degree of burnout in them.

In Medicine and allied specialties 47.14% of the sample had low scores on EE and 82.85 % had low score on DP subscales, while 40% had high scores of PA subscale thus indicating low degree of burnout in them.

In the case of assistant surgeons and allied in rural set 72.30% of sample scored low on EE and 70.76% scored low on DP subscale while majority (44.63%) scored high on PA subscales again indicating low burnout in the sample working in peripheral health care (assistant surgeons).

In the light of interpretation of MBI scale we found that 56.22% had low scores on EE and 66.48% had low scores on DP subscales where as 41.08% had high scores PA subscale thus indicating low degree of burnout in the overall sample.

The over all low burnout in our study sample could be explained by the fact that 62.87% of the professionals in the study had more than 9 years of experience in their respective specialties and 15.67% had 10-19 years of clinical experience. They reported more satisfaction with their work and had a clear perception of their tasks and roles. Similar findings have been reported by Heyworth J et al (1993)¹⁶. Another contributing factor to the low burnout in our study was that 26.25% of the sample was in the age group 36-45 years. Most of them work as consultants in their respective specialties. They had full expertise in their fields and were able to manage the crisis situations confidently, were satisfied with their future, had a job security and evaluated their work groups favorably. These findings are in agreement Heyworth J et al (1993)¹⁶. Assistant surgeons comprised 37.29% of our sample these assistant surgeons work in the department of medical

health which caters to the needs of peripheral health services (Primary Health Centre, Sub District Hospital). They have fixed duty hours, usually handle cold cases, they are not supposed to work as visiting medical officers. All these factors might account for the low burnout in this subclass of medical professionals. Similar findings have been reported by Dua JK (1997)¹⁷.

It might not be out of context to highlight one more observation made, while evaluating the questionnaires from respondents that junior specialist (senior residents) had high burnout scores. This could be attributed to the fact that these junior specialists usually work as emergency physicians, which puts them on long duty hours, they have to manage the emergencies, have increased number of shifts per month and sleep deprivation. These findings are in agreement with those of Goldberg R et al (1996)¹⁸. The other confounding factor for this peculiar observation

could be that junior specialists work on adhoc appointment, and have fear of losing the job, which creates a sense of job insecurity and career dissatisfaction in them.

Limitations:

Junior specialists (senior residents) represented a small percentage of the study sample. Moreover postgraduates (junior residents) were not included in the study. Both these could influence the burnout scores markedly as they are the group of working doctors who face the first impact of any eventually and bear the maximum responsibility of emergency medical services.

The subject is open to debate and hence further studies which include both the above groups of doctors are needed in this respect.

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COMPILATION AND COMMENTARY OF FIFTH NORTH INDIA PG DEVELOPMENT PROGRAMME IN PSYCHIATRY

(13TH – 15TH MAY 2005)

held at

SHER-I-KASHMIR INTERNATIONAL CONVENTION COMPLEX (SKICC)
Srinagar, Kashmir

Chief Coordinator: Dr Mushtaq A. Margoob

Theme: Traumatic Stress

COMPILERS:

Dr. Tasneem Shaukat Hamdani

Senior Medical Officer and Ex-Registrar, Department of Psychiatry
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Dr. Shiekh Ajaz Ahmad
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Dr. Syed Sumaira Nawaz
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Participating Institutions

- | | |
|---|---|
| 1) All India Institute of Medical Sciences, New Delhi | 7) PG Institute of Medical Research, Chandigarh |
| 2) University College of Medical Sciences, New Delhi | 8) Medical College, Kota, Rajasthan |
| 3) PG Institute of Medical Sciences, Rohtak | 9) Psychiatric Centre, Jaipur |
| 4) Govt. Medical College, Patiala | 10) Govt. Medical College, Srinagar, Kashmir |
| 5) Govt. Medical College, Amritsar | 11) King George Medical University, Luckow |
| 6) Dayanand Medical College, Ludhiana | |

The fifth North Zone P.G Development course was held after a long hiatus, in the valley with Dr. M.A. Margoob as the chief coordinator. The theme "Traumatic Stress" was especially relevant in the context of today's world realities and Kashmir in particular, where the populace has been living on edge for the past decade and a half, in an environment predominantly red and black..... The shades of blood and fear.....

DAY 1: Inauguration and registration of the dignitaries and students.

DAY 2: *SESSION IST*

Chair persons: Dr P. Kulhara (Professor and Head, Deptt of Psychiatry, PGI Chandigarh) &
Dr R. C. Jiloha (Professor and Head, Maulana Azad Medical College, New Delhi)

Dr. Mushtaq A. Margoob (Associate Professor, Deptt of Psychiatry, Government Medical College, Srinagar*).

Dr M A Margoob the organizer and chief coordinator of the event is a renowned figure in South Asia when one speaks of trauma, and needs no new introduction.

Emphasizing on paucity of sensitization of masses in the developing world about the psychological trauma, he pointed out the vacillating thought set from a complete lack of awareness ("Denial") to over exaggeration ("Hyper arousal"), especially in light of recent tsunami. He further pointed out that trauma scenario had been studied in the past as well. He quoted following few studies in reference:

The Bhopal gas tragedy (1984) left 22.6% of its victims, with psychiatric sequelae (Sethi et al)

A study from developing world reported 81% of people with PTSD, 57% with Depression, and 19% with Generalized anxiety disorder (Norris et al)

Following the Marathwada earthquake, 59% of adults in affected areas had a psychiatric morbidity, 23% having PTSD and 21% MDD (Sharan et al).

In Latur, a study conducted by ICMR recorded a 21.46% psychiatric morbidity (Agashe).

Turning to Kashmir scenario, he highlighted a rising psychiatric morbidity, as was shown by a study on 60000 subjects from 6 districts, yielding a prevalence of Current PTSD as 7.7% and Lifetime PTSD as 15.18%. Supporting this with a remark on temporal profile of psychiatric morbidity, he noted that compared to 2000 pts in 1990, 60,000 had visited the sole psychiatric hospital in Kashmir.

Addressing the plight of children affected by trauma, he noted that in his study on an orphanage (on 117 subjects), 37 had PTSD, with 2 presenting as subsyndromal PTSD and a high percentage of children presenting with dissociative symptoms, a risk factor for future PTSD.

Turning finally to the poignant tale of Waltengo Nard, a hamlet on the Pir panchal, that was devastated by a snowstorm last year, he said that the amount of trauma borne by the survivors was hard to imagine.

* Taking this opportunity to write a few lines about Dr. Mushtaq A. Margoob, our beloved teacher and mentor, who is not an individual but an institution for us. A selfless father figure who would go to any extent to struggle for the academic and clinical interests of the student community in general and any individual associated with psychiatry in any way, in particular. Even in the face of gross lack in infrastructure and training facilities, working under his mentorship is never without a positive activity and immense satisfaction of serving the suffering humanity selflessly, and learning many more lessons of the life far beyond the prescribed formal technicalities of management of mental health problems of others alone.

For many doctors, the start of troubled times signaled their exodus from the valley, in search of a better future. Although Dr. Mushtaq A. Margoob could easily have done the same, he decided not to. Humra Quraishi, a noted author, mentions of him in her book as, "...this internationally known psychiatrist has no plans to move out of Kashmir-'the valley of trauma', as many medical specialists have begun to call it." At another place, she writes "...Dr. Mushtaq A. Margoob has had several offers to work abroad or in other cities of country but he will not leave the valley. 'I am answerable to him', he said simply. 'I see 300 to 400 patients everyday in my OPD... it is my duty as a human being... that is what God wants me to do...' (Kashmir The Untold Story: Penguin Books, 2004).

His spirit for serving the psychologically traumatized and suffering masses is indomitable and was well reflected by Barkha Dutt, one of the leading media journalists of India, in her popular television show 'Reality Bites'. While discussing the psychiatric scenario of conflict torn Kashmir, she mentioned of him as '... the messiah of thousands of Kashmiris...'

The complete devotion of young colleagues and students, reflected by David D in the Tribune of 8th, December, 2002, also conveyed by Prof. Wig in his letter to Dr. Margoob is but a natural phenomenon, as Dr. Margoob has always been making impossible things possible for his students. This congregation of the leading faculty along with their students from the most prestigious medical educational institutions of the country is just one example of the same process. The standing ovation by this congregation of renowned faculty of the country to him itself testifies to recognition of our efforts.

He ended his speech with a short documentary, which in vivid images and clear words recounted the tribulations of the victims of trauma, of whatever origin.

Dr. M.S. Bhatia (Prof & Head Department of Psychiatry Guru Teg Bahadur Hospital, Delhi).

Elaborated upon PTSD – Myths/ Realities. He initiated with the observation (ironic though it may seem) that PTSD has had to undergo considerable trauma /struggle to get included in the DSM. While adding that in certain countries where trauma is ongoing (continuous), it is not considered a diagnostic entity.

Myth and realities, he stated, are in relation to the words included in the classification- like the traumatic event being experienced, confronted or witnessed – there is nothing about trauma 'heard'. Other discrepancies were exclusion of dissociative features from the diagnostic criteria, as also incomplete coverage of arousal phenomenon (in the light of studies on Afghan refugees and Kashmiri migrants). He concluded by expressing reservations about state furnished figures being unbiased and called for professional community, security and support for mental health researchers engaged in trauma/ disaster research.

SESSION 2nd

Chair persons: Dr N.K. Bohra (Former Prof & HOD Psychiatry Lady Harding Medical College, New Delhi) &
Dr. Prabhat Sitholey (Prof & Head Department of Psychiatry KGMU Lucknow)
Dr. Tej Bahadur Singh (Prof & Head Department of Psychology IHBAS, New Delhi)

In his speech, Dr Tej Bahadur highlighted the three main components of traumatic stress- that it was unexpected, the person was unprepared and nothing he/she would do would stop the event from happening.

He elaborated on the four phases of traumatic stress: the first stage where a person feels overwhelmed and experiences a wide range of emotions, fears, feeling of confusion. The second phase (coming in days and months when there is assistance by different organizations), when the individual experiences denial/intrusive symptoms. In the third phase the individuals shift focus from group survival to individual fulfilment.

Dr E. Mohan Das (President Indian Association of Private Psychiatry)

With a brilliant display of knowledge and eloquence, in his speech, serious this moment and jocular the very next, Dr E Mohan impressed one and all with his acumen and not to forget idiosyncrasies. He on this occasion spoke on the neurobiology of PTSD. Starting with a few words on inclusion of PTSD into DSM (attributing it to Vietnam War) and nosological confusion surrounding it, he quickly settled onto his topic. He spoke of symptoms of PTSD as connotation of deranged neuro circuitry. Concisely, he attributed reexperiencing of traumatic events on exposure to fearful cues to a failure of extinction process, which is executed by medial prefrontal cortex acting on amygdala. In addition basal ganglia and thalamo-frontal circuit dysfunction too may provoke anxiety to traumatic events. Describing locus coeruleus as a major site of norepinephrine secretion in brain, he explained that its excessive activity could lead to autonomic symptoms of hyperarousal (e.g. palpitations, sweating, tremors etc).

The symptoms of dissociation (peri traumatic), derealization, amnesia, altered time perception, and affect dys regulation could, he said, be attributed to dysfunction in thalamic filter functions, as normally thalamus acts as a filter to unwanted noxious inputs. Startle response, so typical of PTSD, can easily be explained by amygdalar kindling.

Putting a lot of emphasis on hippocampus as a seat of declarative memory and its importance in acquisition of new memory, he suggested that hippocampal dysfunction could as well explain traumatic amnesias and impairment of declarative memory. Further, working memory (short term memory) impairment in PTSD could be explained on the basis of PFC and anterior cingulate dysfunction.

SESSION 3rd

Chair persons: Dr. Shiv Gautam (Prof & Head Department of Psychiatry, GMC Jaipur- Rajasthan) &
Dr. S. C. Bhargava (Prof & Head Department of Psychiatry, PGI Rohtak).

Dr Ajit Avasthi (Professor, Department of Psychiatry, PGI Chandigarh)

Dr Avasthi delivered a lecture on the classification and epidemiology of trauma related disorders. Discussing the vicissitudes of PTSD as a diagnostic entity, he described how it had come a long way from being called a feigner's tale to getting established as a diagnosis.

Starting with acute mental syndromes following railway accidents and world war I, the clinicians went on to describe the symptoms of response to trauma in the form of re-experiencing of aspects of traumatic events, startle response, irritability, impaired concentration and memory, disturbed sleep, distressing dreams, depression, phobias, multiple somatic complaints etc. The complex of these symptoms was given a lot of fancy names like Battle fatigue, Shell shock, Freud neurosis, etc. An organic etiology for them was sought initially but later the sufferers were said to be malingering, and hence the name Compensation neurosis. Some workers argued that it was nothing but an exacerbation of the underlying conflicts in a neurotic personality, once exposed to trauma.

In 1952, DSM I adopted a term of 'Gross Stress Reaction' for such symptoms, to be followed by its unfortunate dismissal from DSM II. This deletion, however, was to be short-lived as Vietnam war was only going to get back into the classification racks. DSM III in 1980 introduced the term PTSD for the first time. It was unique diagnosis as it had an etiological basis (unlike other DSM diagnoses). However there was no duration criterion, although Acute and Chronic forms were described, with 6 months as a delineation. DSM III was modified in 1987 to DSM III TR which described three symptom clusters of Re-experiencing, Avoidance and Hyper arousal plus a time criterion of 1 month. Time distinction between acute and chronic PTSD was set at 3 months.

Introduction of DSM IV heralded addition of another stress related disorder, Acute Stress Disorder (lasting 2 day-4 weeks)

Talking of ICD classification system, he noted that ICD-9 had a short section on 'Acute Reaction to Stress' which was changed in ICD-10 to 'Reactions to Severe Stress and Adjustment Disorder'. Neurotic disorders were dropped from ICD-10. PTSD was taken up as a diagnostic entity for the first time in 1992.

Comparing DSM system with ICD he pointed that DSM puts stronger emphasis on avoidance and numbing, whereas hyper arousal is not so important for diagnosis in ICD system. Also DSM requires impairment and duration criteria for diagnosis. He further pointed out a poor concordance (35%) between the two systems.

He concluded his topic with a brief review of the epidemiology of trauma related disorders.

Dr. J.K. Trivedi (Prof Department of Psychiatry, KGMU Lucknow)

He called India the theater of disasters (both natural and man made). As a result there is a chronic ongoing stress with the greater impact on the underprivileged as they are least informed, prepared or equipped. He opined that serious long and short term morbidity resulting from trauma due to any cause poses a great threat and risk, often sidelined because of greater political issues and policy matters. He considered it a major challenge to bridge the gap between knowledge and practice to narrow the distance between risk perception and risk mitigation activities. Early preparedness limits disaster mortality and consequently threat to human society from traumatic events. Risk management, he suggested, depends upon academic research (useful in policy making) and scientific and technological innovations. Research data obtained thereby can be utilized to limit vulnerability of a population (illiteracy, ignorance). Dr. Trivedi Advocated community participation by incorporation community based issues at state / national level- this involves strategies for prevention and combating consequences of trauma and the need to hasten decision making to produce visible results.

SESSIONth

Chair persons: Dr. Neena Bohra (Former Prof. & HOD Psychiatry, Lady Harding Medical College New Delhi) & Dr. P. K. Dalal (Prof Department of Psychiatry, KGMC Lucknow).

Dr. Harish Shetty (Senior Psychiatrist Mumbai)

Dr. Shetty spoke on the theme of Cultural Perspectives of Trauma, impressing upon the mental health professionals to widen their purview of perceiving trauma and its dimensions. He said that cultural assessment of a disaster is of utmost importance, because, PTSD is not a disaster but a part of it.

Speaking of himself as 'neither an orthodox, nor an agnostic', he said that culture is expressed all the time, religion notwithstanding. Stressing upon the importance of cultural values in India with regards to disaster, he said that Cultural Arousal by religious fanatics can be a prelude to a disaster (e.g., riots). Further, it is a common practice in India to ascribe disasters to angry gods and ancestral sins, showcasing the influence of cultural memory, which although absurd can be an important means of coping. However in the event of a disaster religious opportunists can use soccours as a means to further their missionary ends. Disasters also entail a Psychopathic Liberation, a transcultural phenomenon fuelled by lawlessness, wherein looting and arson abound.

Talking about the methods of living down trauma, he said that Regrieving in the form of 'shradhanjali', using cultural symbols (e.g., tuls tree among Hindus), idols of deities, photographs of victims etc, is a time tested and culturally inculcated method.

Referring to superstitions in the form of rumors about further disasters or misuse of compensation money, he said that they could hamper normal rehabilitation.

Calling attention to the cultural vices, he said that Grief and Disasters, but not Culture are secular, i.e., where culture divides people, disasters unite them. Also culture fashions priority, i.e., a disaster would be trivialized in the foreground of another less important but culturally more fashionable event(s). Culturally conceived and propagated stereotyped mindset towards particular people (like minorities) is yet another vice of culture.

Telling mental health professionals as 'culturally illiterate', he stressed upon the importance of cultural awareness and training as also the need of being less obsessed with DSM and ICD, more empathetic, less intolerant and always ready to listen to the disaster victims.

Dr. Nimesh Desai (Prof & Head, Department of Psychiatry IHBAS, New Delhi)

He talked of public health perspectives in the light of studies done in Kutch, Latur, Gujarat, as also a Needs Assessment study with Dr. M. Margoob done in 1998. He suggested that in disaster, trauma situations the normalcy paradigm needs to be accepted first- willingness to work as health workers, relief or rehabilitation workers and not as Psychiatrists or counselors. He concluded that one 'should neither over, nor under psychiatrize'; "don't rush to label at least in the early phase (1st few weeks)"; he warrant against isolated or vertical services and emphasized liaison with other health care agencies. Medication and diagnosis should be used when needed 4-6 weeks post disaster. He concluded that the experience in service delivery in disaster situation in India, can be extended to other trauma situations, there being certain lacunae in that area. He stressed the need for micro and macro studies (at the policy level) for a way to integrate our work with others.

DAY 3

SESSION Ist

Chair persons: Dr. Paramjeet Singh (Prof & Head Deptt. of Psychiatry Medical College, Amritsar)

Dr. Kuldeep Sharma (Prof and Head, Department of Psychiatry Rajindra Medical College, Patiala Punjab)

While talking about strategies to prevent PTSD in trauma victims, he also shed light on Acute Stress Disorder (ASD) emphasizing the need for its diagnosis, because failure to detect this entity can lead to progression to Chronic PTSD, an Incapacitating reality. He mentioned that though acute treatment with SSRIs was effective strategies for prevention of PTSD have not been established. Studies are coming up but literature is scanty. He upheld the use of CBT as a preventive strategy, which involved de-briefing, breathing techniques, relaxation therapy, confrontation of fears by reliving, challenging of irrational beliefs and cognitive restructuring.

Dr. Rajesh Nagpal (Secretary General, IAPP)

He mentioned that the Indian reality scales for PTSD have not been tested for reliability and validity in Indian context. He pointed out that while assessing Post Traumatic Symptoms MMPI and psychological inventory may underestimate or misinterpret traumatic effects, and made reference to the Davidson trauma scale. The CAPS, detailed assessment of Post Traumatic Stress, basically focuses on kind of trauma and resultant stress. It measures aspects of adjustment influenced by traumatic events. He concluded by saying that laboratory studies validated the use of psychophysiological assessment as a tool for PTSD assessment. He also suggested the development of specific PTSD instruments related to civilian trauma, the hazards of over diagnosing, requirement of Forensic q assessment multisource, and multiscore instrument for children (currently un- available). He put forth the Kashmir model as worth following.

Dr. Vikas M. Sharma (Consultant Psychiatrist VIMHANS- Nehru Nagar New Delhi 110017)

In his concise and forceful presentation, Dr. Vikas touched upon non pharmacological interventions in PTSD. He astutely explains and the centrality of trauma while correlating it with the concept of loss and bereavement. Though, he did not deny role of intervention in trauma victims, he cautioned against a hasty approach. Masterly activity, watchfulness and not excessive intervention early on were needed. He stated that safety, logistics, good rescue preceded psychological intervention. As per Dr. Vikas a Psychiatrist should go beyond general issues- give enough time to the victim, understand of wide range of affect and non critically accept say measure of hostility (being part of the system).

He concluded with four main principles-

- Explanation, destigmatization.

- Exposure with some measure of support work.
 - Defocusing from stress, use of EMDR, group therapy, along with complementary therapies, like faith healing, meditation etc.
- Finally he stressed the psychiatrists domain lies in judging the best balancing between medication and non drug intervention, as also working with people more trained in working with disaster affected populations.

SESSION 2nd

Chair persons: Dr. J. K. Trivedi (Prof Department of Psychiatry, KGMC Lucknow) & Dr. Ajit Avasthi (Professor, Department of Psychiatry PGIMER Chandigarh).

Dr. Chittaranjan Andrade (Professor & HOD Psychopharmacology, NIMHANS Bangalore).

In his brilliant exposition, Dr. Andrade touched upon the prophylaxis and pharmacological treatment of PTSD. He observed that two groups of agents have been used in primary prevention of PTSD on the premise that there is a state of autonomic hyperarousal maintained reportedly over months and years, which recurs during recall of traumatic memories. He quoted two study published in Biological Psychiatry (1st Pitman et al – 2nd Byber 2003). In the first study Propranolol / Placebo was started within six hours of onset of symptoms, for ten days, and then stopped. Assessment at 1-3 months showed significantly lower incidence of PTSD (18%) in Propranolol group compared to placebo (30%). Incidence in two groups was same after three months. He states, that there is a role of Propranolol started early, maintained for 1-2 weeks, tapered and withdrawn. Symptoms of PTSD in 91 patients undergoing Cardiac bypass surgery (treated with high doses of Hydrocortisone bolus prior to anesthesia, then maintained on a 24 hr infusion with tapering and withdrawal over 4 days) were of 20% of less severity than placebo.

Drugs advocated for treatment of PTSD are SSRIs (Paroxetine and Sertraline only being FDA approved). Other drugs studied have been Fluoxetine, Fluvoxamine, Nefazodone (effective for insomnia because of action on 5HT receptors), Venlafaxine (in SSRI refractory PTSD). For adrenergic hyperactivity Propranolol, Clonidine and Prazosin were mentioned. Prazosin significantly improved reexperiencing, numbness, avoidance, hyperarousal, dreams, sleep quality and global ratings.

Anxiolytic (Benzodiazepines) alone, he suggested, are not a good idea because they impair learning process, so they would like wise impair unlearning process.

Dr. Andrade quoted the study by Dr. Mushtaq Margoob, wherein 17 treatment refractory patients were treated by bilateral ECT (6 ECTs). Excluding 1 drop out, there was significant improvement in the patients, amounting to almost remission of symptoms. Anticonvulsants and mood stabilizers have a use in augmentation with encouraging results. He advocated the combination of pharmacotherapy with CBT.

Dr. V.N. Vahia (Senior Psychiatrist Mumbai)

The topic that Dr Vahia had taken up to speak upon was "Co morbidity in PTSD", emphasizing, that PTSD wasn't alone to cripple the sufferers.

Almost 80% of PTSD patients fulfill criteria for at least one additional psychiatric disorder, the commonest being Affective disorder, Anxiety disorder, Somatization, and Substance abuse. Further the psychopathology can be related to PTSD as being Current (integral), Concurrent (incidental), Coexistent (interfering) or Comorbid (impairing) to it. It is also important to differentiate PTSD from OCD, phobias, dissociative disorders and depression: standing as close differential diagnoses to it.

Spectrum of the responses to trauma spans from Transient Stress Reactivity to Acute Stress Disorder to PTSD, an extreme diagnosis. Addressing, critically, a few flaws in the diagnostic system for PTSD, he said that clinical presentation can vary with nature of stress, proximity to stress, extent of trauma, personality of victim, and availability of help, to name a few factors. Also DSM criteria fail to describe usual presentations of chronic sequelae to trauma.

Not all the trauma survivors develop PTSD. Many present with trauma related non-PTSD symptoms, like pathological dissociation (61%), somatization (47%) and affect dysregulation (35%).

Discussing the sequelae to war zone trauma, he introduced the audience to a lesser known term of DESNOS (Disorder of Extreme Stress Not Otherwise Specified) or complex PTSD, which entails co morbidity with failure to recover from the original trauma. DESNOS usually results from early childhood trauma or participation in war zone atrocities, and is featured by extreme levels of intrusive trauma-experiencing symptoms, altered mood and impulse regulation. Talking of war veterans in this context, he said that 31% had symptoms of both PTSD and DESNOS, while 27% had a pure DESNOS, 29% had pure PTSD, and only 13% had neither.

He spoke in brief about Sub threshold PTSD, which is featured by at least 2 symptoms of PTSD and usually has a comorbid depression, with severe suicidal ideation.

Rounding off his topic with the management of PTSD-co morbidities, he noted that drug therapy was subject to patient's willingness, with cognitive therapies and coping techniques to supplement.

SESSION 3rd

PANEL DISCUSSION ON

"ROLE of MENTAL HEALTH PROFESSIONALS in TRAUMA and its SEQUELAE"

MODERATOR:

Dr Alok Sarin (Senior Consultant VIMHANS –New Delhi 110017)

PANELISTS:

Dr. B. S. Chavan (Prof and Head Department of Psychiatry Govt. Medical College, Chandigarh)

Dr. Ranjeev Mahajan (Head, Department of Psychiatry, KGMC Ludhiana)

Dr. Reshma Aggarwal (Consultant Psychiatrist, MAMC New Delhi)

GLAD TIDINGS - INCEPTION OF VIBRANT SAARC PSYCHIATRIC FEDERATION UNDER THE PATRONAGE OF WORLD PSYCHIATRIC ASSOCIATION: REALIZATION OF A LONG CHERISHED DREAM

Mushtaq A. Margoob

South Asian region comprises of seven countries - India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and Maldives which are members of South Asian Association for Regional Cooperation (SAARC). Recently it has been realized that the opportunity to learn from one's own neighbors, share experiences to examine similarities and differences, and explore the potential for regional cooperation and collaboration is immense. The shared cultured heritage and history makes such efforts easy and, at the same time, the political differences make them difficult. This can be done only if one forgets the political differences and makes an attempt to learn from each other. As pointed out by Dr. Nimesh G. Desai Editor, Indian Journal of Psychiatry, in his editorial "Regional Cooperation of Mental Health in South Asia: Opportunities and Challenge" (IJP, April-June, 2005, Vol. 47, No. 2), the ability and willingness to overlook political differences and mutual biases has been helped by the experience of the South Asian diaspora across the globe, particularly the countries of the First World.

A landmark event in the history of cooperation of Mental Health in South Asia took place on January 21, 1978 at New Delhi during the Annual Conference of Indian Psychiatric Society and Regional Conference of World Psychiatric Association. With the inauguration of GAMHA (Group for Advancement of Mental Health in Asia). This was the first time in history that mental health leaders in sixteen countries in Asia declared to initiate an organized effort to promote mental health in their respective countries (WFMH 1978).

But despite this good beginning, efforts to form an Asian or South Asian Federation did not bear fruit. Renewed efforts were made during the last decade to form a federation in South Asia for the advancement of mental health. Representatives from several Asian countries met together at Colombo on 19th August, 2003 during the International Conference of Psychiatry organized by South Asian Forum on Mental Health. The meeting discussed the need to form a joint SAARC Federation and also an Asian Federation. On 12th September 2003, the Executive Council meeting of IPS was held at Gangtok and decided to take the lead in pushing the idea forward about the formation of SAARC Federation. On 10th January the 56th Annual General Body Meeting was held at Mysore and approved the formation of the SAARC Psychiatric Federation.

The representatives of the Psychiatric Societies of South Asian Countries met at Lahore on September 19th, 2004 during the WPA Regional and Inter Zonal Meeting and formed the SAARC Psychiatric Federation, thus realizing a long held dream. The second meeting of the federation was held at Chandigarh on 30th January, 2005, during 5th ANCIPS.

In keeping with the spirit of earlier meetings the first conference of SAARC Psychiatric Federation was held at Agra on 2-4th December 2005. In the words of Roy Abraham Kallivayalil, General Secretary, Indian Psychiatric Society and Secretary General SAARC Psychiatric Federation, the conference was a grand success. Professor Juan E. Mezzich, President, World Psychiatric Association was the Chief Guest and he inaugurated the conference on 3rd December, 2005 which was presided by Professor Abdul Malik Achakzai, President SPF. Dr. S. Nambi (President IPS) welcomed the gathering and Secretary General SPF read the report. The number of attendees was 340. The countries represented included India, Pakistan, Sri Lanka, Bangladesh, Nepal, Malaysia, Australia, UK, USA, Greece and Canada.

This first SAARC Conference of Psychiatric Federation has took place in prevailing congenial atmosphere and yearning for mutual cooperation, peace and prosperity in the region. A chronological mention of overall positive developments in this context may not be out of place here.

Prime Minister Pakistan Mr. Showkat Aziz called for reviewing the spirit of the principals and objectives of SAARC Charter to create peace, progress and prosperity in South Asia. He told, "let us re-position SAARC as a pragmatic, issue driven and result oriented organization which can be a factor for peace and an engine for progress in the region by creating and enabling environment, people to people contacts, promises to lend it greater vigour and dynamism".

While delivering the keynote address at the inaugural session of the Microsoft Government Leaders Forum, India's Science and Technology Minister, Mr. Kapil Simbal said on 6th December, 2005, "more cross-border exchange within the region so that Asia's talented can work freely throughout the region

and stimulate each other's human capital. Through our human capital we can help Asian Science and Technology Institutes integrate globally". Dr. A. Ramadoss Minister of Health and Family Welfare, Government of India, expressing his great pleasure on the holding of 1st International Conference of SAARC Psychiatric Federation sent the message that, "the growing recognition that a large proportion of persons with mental illness experience a poor quality of life with long term disability, persisting symptoms or a relapse of illness have given birth to the field of psychiatric rehabilitation with much emphasis on psychological rehabilitation. The deliberations of mental health professionals from SAARC countries and also from the rest of the world will help promote new approaches in psychological rehabilitation services and bring forth newer avenues to meet the challenges of mental health rehabilitation.

The Prime Minister of India, Dr. Manmohan Singh in his message on the eve of this 1st International Congress of Mental Health Professionals of SAARC region expressed that, "the establishment of the SAARC Psychiatric Federation in the year 2004 and the organization of the International Conference of the Federation this year are indicative of diverse efforts to strengthen SAARC and bring together health professional from the SAARC region to address its common problems. The Conference on, 'Mental Health in South Asian Region - Problems and Priorities' should stimulate regional initiatives for joint research so that analysts and experts in the region can learn from each other".

Prof. Juan E. Mezzich, President, World Psychiatric Association, remarked "in its short two years, SAARC Federation has established itself as a crucial protagonist of key activities in South Asia, home for a sizeable part of humanity. Its cooperative relationship with the World Psychiatric Association (WPA) is a source of high stimulation for all of us. This International Conference offers us the opportunity to discuss fundamental organizational issues for international psychiatric and mental health in this part of the world, especially how to face disasters more effectively and how to promote constructive collaboration in WPA Region IV that encompasses Asia and Australia".

In complete conformity with spirit and policy Director General of Indian Council of Medical Research (ICMR), Prof. Dr. Ganguly, in spite of his overwhelming engagements saw to it that a meeting between mental health experts from India and Pakistan was held in his office chambers on the morning of 5th December, 2005 to discuss the most recent devastating earthquake of 8th October, so that serious and substantive research gets started at the earliest.

The two teams discussed general issues of medical research in the two countries and recognized potential for working together. The experience with the recent earthquake in Pakistan and Kashmir was shared. The experience and some database from Srinagar and other parts of Kashmir were also discussed. The experience and the research projects under Disaster and Medical Health at ICMR were also discussed, with a special mention of the role of IHBAS.

The following ideas were discussed and agreed upon:

1) **Collaboration on Disaster and Medical Health**

In view of the experience that agencies and teams from Lahore and Pakistan have for the recent earthquake in Pakistan and Kashmir, Dr. Haroon will coordinate the initiative from the agencies in Pakistan, for work with ICMR. These agencies will include Pakistan Medical Research Council and the Ministry of Health, Government of Pakistan.

The possibility of working together on research projects, and a joint meeting to share experience will be actively explored. A bi-national meeting could be arranged in June 2006 to compare research findings of the recent disaster wherein research aspects and community responses and other experiences could be shared.

2) **Explore possibility of collective research on Mental Health:**

The potential for collaborative research on other aspects of mental health was also recognized, and it was agreed that this possibility will also be explored, in terms of projects, consultations and joint meetings.

3) **Research on non-communicable diseases (NCDs) and other aspects of Medical Research:**

It was also discussed that the possibility of working together on areas of mutual interest in medical/health research, especially between the PMRC and ICMR leading to MOU/joint working group be explored. The commonalities in cultural and life styles factors may be explored further through NCD surveillance activities.

First Conference of SAARC Psychiatric Federation, Agra: A Grand Success

Dear Colleagues,

We are very happy to report, the First Conference of SAARC Psychiatric Federation, Agra 2-4 Dec 2005 was a grand success. Number of attendees- 340. The countries represented include India, Pakistan (with 37 delegates), Sri Lanka, Nepal, Bangladesh, Malaysia, Australia, UK, USA, Greece and Canada. The CME Programme was inaugurated by Prof NN Wig on 2nd Dec. WPA President Prof Juan E. Mezzich was the Chief Guest and he inaugurated the Conference at Hotel Mughal Sheraton on 3rd December, which was presided by Prof Abdul Malik, President SPF. S Nambi (President IPS) welcomed the gathering and Sec General, SPF read the report. Sri. Ramjilal Suman M.P., George Christodoulou (Athens), WPA Representatives-JK Trivedi, Haroon Rashid Choudhry (Pakistan), Bruce Singh (Australia) and others spoke.

Symposia on Mental Health Legislation in South Asia, Disaster management, Dementia, Mental health mapping, Media and Mental Health, a Panel Discussion on Religion on Psychotherapy led by Prof RL Kapur, Special SAARC Session, Guest Lectures, Special Lectures, Free papers, poster sessions and cultural programmes, visit to Agra Mental Hospital and the famed Taj Mahal were some of the highlights. We place on record our deepest appreciation to UC Garg, Organising Secretary and his dedicated team who worked meticulously and tirelessly for the success of this International event.

Positive outcomes of the Scientific Meeting: This was the biggest gathering of psychiatrists from South Asian countries till today. 90% of the delegates were from SAARC (South Asian Association for Regional Co-operation) countries- who share a common cultural, political and religious heritage. This meeting has strengthened this relationship and opened up further vistas. It is worthwhile to note, this conference was co-sponsored by WPA and 18 WPA CME Credits were awarded to the delegates. We are thankful to Prof Pedro Ruiz and Prof Allan Tasman for their help and support in this regard. And our heartfelt thanks to all the delegates who attended this conference to make it a remarkable success

Regards

Roy Abraham Kallivayalil
Secretary General, SAARC Psychiatric Federation
Professor of Psychiatry, Medical College, Trichur -680 596 INDIA

To,
Prof. Juan E. Mezzich
 President World Psychiatric Association.
 Professor of Psychiatry & Director International Center for Mental Health Mount Sinai School of Medicine, NYU, 5th Avenue & 100th
 Street, Box 1093 New York, New York 10029-6574
 Tel # 718-334-5094 - Fax # 718-334-5096
 Email: juanmezzich@wpanet.org

Dear Prof. Juan Mezzich,

It was a pleasure to have attended and participated in a WPA meeting at Agra on 3rd of December, 2005 under your dynamic and able leadership. Sir, I would be grateful if the minutes of the meeting can be sent so that I can approach the President, Indian Psychiatric Society to be a member of the Advisory board for WPA task force on Kashmir earthquake and also to request Dr. Mushtaq Margoob, Professor, Department of Psychiatry, Medical College, Srinagar (who has worked with disaster victims for more than 10 years) and also Dr. Srikala Bharath, additional professor, Department of Psychiatry, NIMHANS, Bangalore (who has worked in women and children of disaster affected areas at Latur and Orissa) to prepare a workplan for the disaster affected areas in Kashmir on the Indian side of the border. I would also like to co-opt Dr. Roy Abraham Professor and Head, Department of Psychiatry, Medical College, Trichur as a member in the advisory board as well as member secretary of the task force. Sir, I would await your response.

With regards,

J.K. Trivedi,
 MD (Psych.), M.R.C. Psych. (U.K.)
 Professor
 Dept. of Psychiatry
 King George Medical University
 Lucknow - 226006
 India

Zonal Representative for Southern Asia - Zone-XVI of WPA
 Immediate Past President, Indian Psychiatric Society
 Editor, Indian Journal of Psychiatry (1997-2002)



**INTERNATIONAL SEMINAR ON PSYCHIATRY
(Disaster Management & Psychosocial Rehabilitation/
Community Education Programme in Psychiatry)**

January 21-22, 2006,

Fountain House, 37-Lower Mall, Lahore – Pakistan

Organized By

WPA (Zone-15) & WPA Section on Psychiatry in Developing Countries

In collaboration with

**WHO, South Asian Forum, Asian Federation of Psychiatric Associations, Pakistan Psychiatric Society,
World Association of Psychosocial Rehabilitation and International Bureau of Epilepsy**



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DEVASTATING EARTHQUAKE: A FIRST HAND REPORT

A team of young doctors who as promising students, out of their own zeal had volunteered to join us and got trained in psycho-social interventions in trauma and snow storm disaster during our outreach activities from time to time. These doctors based themselves in the earthquake devastated areas and tried their best to help the victims suffering from an unfathomable loss and grief. The efforts of these young doctors are worth appreciation. Their president Dr. Samieh Deva presents a first hand account of these victims in the lines below: (Editor)

On October 8, 2005 a devastating earthquake hit Kashmir. It brought a lot of death and destruction leaving the victims vulnerable to a harsh winter ahead without any basic amenities of life. Within a moment it brought to limelight our inability to deal with the natural calamities, and exposed our claims to disaster management. The life of victims seems to have come to a stand still. They could be seen unable to give a vent to their feelings. The hustle and bustle of ill planned rescue and relief work added to the trauma. Victims were forced by the circumstances to come down from their hilly inhabitations (in Tangdhar and Uri) to collect relief material like food, blankets etc. Scenes of loot that sometimes ended in fights were the order of the day. The daily routine of the people looked like that of beggars. As doctors, we saw lots of neglected injuries and toiled hard to have them. What was still heartening in all this was that people responded overwhelmingly to the event and visited the disaster hit areas in large numbers. They could be seen sharing the suffering of the people, helping them, listening to them and consoling them but unfortunately this response suffered a fatigue and slowly breathed its last. Various reasons could be cited for such an occurrence. Firstly, it seems to be a natural course of all sympathy outbursts that once the pain and suffering is visible it moves the human heart, but with time people get used to see them suffer. Secondly, lots of hurdles have come up enroute to the disaster site. In one of our recent visits we had to spend 60% of our time just facing these hurdles rather than rendering services. Lastly, there seems to be an impression among the general public (including even well educated people) that the aid distributed amongst the victims has made them rich. A calculation of fingertips is enough to discard the idea to a dustbin. One of our colleagues, who was involved recently in a door to door survey in one of the villages in Karnah (Neichia) concluded that on an average each household had received 50kgs of eatables, 10kgs. of sugar, 10-15 blankets and a cheque for Rs. 40000/- (of course not all households). One of the persons from Chitrakote reportedly had accumulated the largest number of blankets (160). None of these figures cited above would make them rich enough to be neglected.

The condition of majority of sufferers is pathetic. The sheds that have been constructed by people to live in may serve as a temporary shelter, but soon they need a house to live in. These sheds would hardly provide any protection against the weather, and pollution index inside them (though not measured) would be very high. During our visits we came across ailments among children, women and old which could be attributed to this faulty shelter. The already existing problems like malnourished children, infections etc. have got a chance to flourish and need to be addressed.

It is very important to mention here that quite a good percentage of people in these areas are experiencing psychological symptoms. These symptoms range from those of frank severe reexperiencing in some people to hypervigilance and sleep disturbances in almost all. We could also see that the faith in Allah, the hereafter and the reward and punishment proved to be the most common and effective coping mechanisms. Besides this, psychological distress was comparatively less in regions where people had started to construct their houses.

Psychological symptoms are the ones that are most susceptible to be neglected and forgotten. The fact can be seen in the exclamatory remarks of a medico, who earlier had toiled hard to deliver door to door medical relief to the victims; his heart having been moved by gangrenous wounds he saw. He said "Oh! these people do not need our help, none amongst them is mad". It is also not out of place to mention here that any effort to bring cognitive enlightenment must be centered around the normal grief model of our society, which has been described in following words in one of our recent handouts on the issue.

"The fabric of our society centres around the basic concept of one God. We believe that life and property belongs to Allah and he takes them back whenever he wishes and for everything there is a said time to occur; hence in griefs we must be patient, aim for reward that is with Allah. We believe in the verses of Allah many of which speak about life and death". Excerpts from Holy Qur'an:

"And certainly I shall test you with something of fear, hunger, loss of wealth, lives and fruits but give glad tidings to those who are patient".

In the end, I would like to say that Government and non-government agencies should take concrete steps to rehabilitate people. Media should come forward to bring the bare truth about the disaster to limelight so that it could serve as a bench mark to access progress in rehabilitation. An effective disaster management plan needs to be brought out of text books into the practical field both at present and in future. We at "Doctors Offering Care", who light the candle of social service in young medicos, acted very little not even comparable to a drop in an ocean, but did it differently by the grace of Allah. We based our medical and social relief activities (whatever little aid we had) on door to door basis in Karnah. The smile at the lips of people of Dringla where we had operated in relief phase brought solace to our hearts while we visited them for psychosocial rehabilitative measures.

True as it is "the way you provide the food, the shelter and basic amenities of life however little they may be, is going to effect the long term psychosocial outcome of the victims."

EXCERPTS FROM

THE NEWYORK TIMES INTERNATIONAL SUNDAY, JUNE 2, 2002

Kashmir..... The war, the fear, the death and destruction, have taken a heavy psychological toll. In 1990, about 1700 men and women sought help in Srinagar at the psychiatric diseases hospital, a run down facility where bare light bulbs hang from exposed wires in the directors office last year, the number seeking help was 47,828, according to hospital records.

Most of the patients are women. The major illnesses are depression and post traumatic stress disorder, hospital records said. Suicide rates are rising, primarily among teenagers.

Children here are being deprived a normal childhood, said Dr Mushtaq A Margoob, an Associate Professor in the department of psychiatry at the Government Medical College, Srinagar. Instead of spending sundays with their parents in the beautiful Mughal gardens here, families stay at home, fearing another bombing.

This was a hospitable society where, at one time, "when somebody invited you for lunch, you found you were there for dinner," Dr Margoob said. "When you are invited for dinner, you will have breakfast.".....

TIMES OF INDIA, October 23, 2005

TRAUMATIC TIMES FOR VALLEY

By Aarti Tikoo Singh/TNN

Since the October 8 killer earthquake, 11-year-old Salma wakes up every night screaming. Terrified, she looks around the room and then crouches in one corner of her bed, fixing her gaze on the floor, sobbing silently.

Four years ago, Salma lost her father, a tea-seller in Rajouri, in a grenade explosion. Since then, she has been hyper-anxious and depressed. The quake that ravaged Kashmir, has led to a relapse of her heightened state of anxiety.

"Salma's symptoms are classic of post-traumatic stress disorder (PTSD)", says psychiatrist Mushtaq Margoob.

"In trouble-torn Kashmir, where 7% people of the total population are already suffering from PTSD, the earthquake has triggered a fresh spate of anxiety and relapses", said Margoob.

PTSD is caused because of frightening events like violence, physical torture, rape or natural calamity. Symptoms include recurrence of memories or dreams of an event, a sense of isolation, disturbed sleep and lack of concentration.

Margoob, who has conducted several surveys on the mental state of Kashmiri populace due to the past 15 years of militancy and terror in the state, said 15% people in Kashmir valley, including Kargil, are coping with symptoms of PTSD and 19% are depressed due to conflict.

He said Salma's case reflects the precarious mental health of the people in Kashmir. "The last time her symptoms were manifested when Kashmir was hit by heavy snowfall, rain, landslides and avalanches," he said.

Natural calamities have made matters worse. The psychological trauma is usually transitory, but avalanches last winter have left such deep scars in the minds of people of Wategoo that they refused to visit their homes high in mountains.

"To them, their wrecked one-room dwellings in the mountains are like mass graves," says Margoob. "After persistent efforts by my team, we have been able to take them there but quake has made them relive their worst fears"..... Margoob said the depth of the problem could only be ascertained after six weeks as it would take that long for people to fully acknowledge that they needed help.

PSYCHIATRIC SCENARIO IN J&K STATE

Working as a psychiatrist has to be a mission

Dr Mushtaq Ahmad Margoob, Associate Professor of Psychiatry in G.M.C Srinagar is a name well known. Plumbing into the depth of human mind, a researcher, an academic, a scientist, and above all a human being who feels the fragility of life of his fellow beings, Dr. Margoob, talks to GK Reporter *Shaiq Nazir*.

Q: A lot of stigma is attached to psychiatric disorders and no one wants to talk about these openly. Why?

A: Psychiatric disorders like, physical illnesses have always existed in Kashmir, like any other part of the world. You are right in saying that lot of stigma is attached to mental disorders. It has social as well historical background. Until 50's there was no specific medical treatment or cure available for such disorders. Severe patients were mostly kept in isolated places away from the society. In Kashmir almost one hundred year back a lunatic asylum was created in the backyard of the Srinagar Central Jail. It had the provision of keeping few individuals. Over the years it transformed into the present 100-bedded sole psychiatric disease hospital of Kashmir valley. At present this hospital caters to the needs of most of the people of Kashmir valley, Ladakh region and adjoining areas of Jammu province. It is attached to G.M.C Srinagar as its undergraduate/postgraduate teaching institution. Up to late 60's the hospital was mainly rendering services to severely disturbed or mentally deranged individuals mainly as a custodial care institution without O.P.D services. In 70's it was a Swiss psychiatrist Prof. Erina Hoch who worked here as the 1st Professor and Head of under-graduate department of psychiatry in G.M.C, Srinagar, to increase the awareness about the emotional disorders.

During mid 80's to mid 90's late Prof. A.A. Beigh made an outstanding contribution to clinical psychiatry in Kashmir, rather gave it a respectable place like any other branch of medicine. During this period people not only thronged psychiatric clinics but started coming openly for psychiatric treatment at the hospital. Premature and sad demise of Prof. A.A. Beigh was a great loss to the suffering community in general but to my person in particular. At present besides this hospital, psychiatric O.P.D services are also available on emergency basis twice a week in SMHS hospital and full time in SKIMS Medical College Bemina.

With increased awareness among people about psychiatric disorders, better treatment results and the present prevailing conditions the number of the cases seeking help for emotional disorders has increased over the years. Initially during 80's the number of the patient in OPD would range from 8-10 cases per day. While as during 1990's there has been a phenomenal increase in the number of the cases seeking help for different psychiatric disorders. Against a total number of 1768 cases in 1990, more than 48,000 cases were seen in the OPD during the year 2003.

Q: How do present conditions affect the mental health of a common man here?

A: Exposure to a variety of severe traumatic stressors like killings, destruction of property etc. over the last one and a half decade has become almost a daily affair for majority of the population living in Kashmir. Keeping with the commonality of the trends perceived universally, with its specific socio-cultural settings, the psychological impact of such a situation is likely to be experienced in several ways. Individuals may suffer from various psychiatric ailments including, post traumatic stress disorder (PTSD), while as new social processes and shared behavior may appear throughout the community, initiated by the change in the shared psychological states of the affected persons. The traumatized persons may most unconsciously oblige their progeny, to resolve their own unfinished psychological tasks, related to the shared trauma such as mourning, and other losses. We have been seeing an admixture of all these trends among our patient population over these years.

Q: Which psychiatric disorders have increased here over the past decade or so?

A: It will not be possible to go into the details here. In brief, in the light of the hard-core scientific data~ emerging from my studies, I might say that in early 90's majority of patients who sought treatment belonged to different anxiety disorders group. Gradually the trend changed and at present the majority of the cases are seeking treatment for depressive disorders, which might be one of the main causes of increase in suicides after mid 90's. The pilot study on the prevalence of psychiatric disorders in the community, which I conducted in the year 2002, showed that nearly one lakh persons out of about ten lakh depressive patients had strong suicidal tendencies.

Following publication of our 'Comparative study of suicide attempt cases reporting at the Hospital for Psychiatric Diseases and the emergency department of general hospital respectively in year 1997', we have been working over the past seven years on identifying the possible risk factors, including biological markers for suicidal tendencies and hope to publish our results within coming 2-3 months, which are quite revealing.

Q: Drug addiction has been increasing alarmingly in J&K. What is the present scenario?

A: In early 90's majority of the people believed that the menace of drug abuse has been almost completely eradicated as a result of ban and retaliatory measures by various organizations. But, our research paper entitled 'Drug abuse in Kashmir, Experience from a provincial level psychiatric disease hospital' published in 1993 in the *Indian National Journal of Psychiatry* carried the clear warning in these words 'the reduction in the number of persons reporting or seeking help for drug related problems at the hospital O.P.D should not be misinterpreted as an indication of decreasing incidence of drug abuse in Kashmir. The almost daily reports of big seizures of substances of abuse like charas and heroin in the local press is a clear indicator that the menace is touching new heights and that the situation will eventually become explosive. Urgent steps must be taken to curb it before it is too late'. The present explosive situations is clearly reflected in one of our latest studies on the subject entitled 'Changing socio-demographic and clinical profile of substance use disorder among patients in Kashmir valley'. It is based on the drug addiction scene during the year 2002 and published in the current issue of JK Practitioner. It was also carried out by your newspaper on 22nd Sep; 2003 under the heading 'Drug use on rise in Srinagar'. The results are startling. Even young semieducated women from far-off rural areas are using harder substances like opioids, benzodiazepanes etc. at times intravenously. The abuse of the traditionally used drugs is being completely replaced by harder substances like heroin and over the counter drugs like opium preparations, combination injections, and codeine containing cough syrups. Keeping in view this scenario the concluding words of this study might not be out of place here. Drug abuse must be considered

a total community problem and thus the responsibility of every one. Harmful effect 'on health from substance abuse needs in-depth study. Access to availability of addictive substances and its spread needs to be checked with joint efforts of all Concerned Govt. agencies, N.G.Os, at community and individual level. The dreadful repercussions of ever-increasing drug abuse in the state of J&K provides sufficient justification for the urgency to resolve and apply preventive, curative and rehabilitative strategies to contain this epidemic'. The possible association between drug abuse and posttraumatic stress disorders (PTSD) warrants a community study and you would be glad to know that this study has already been undertaken with the assistance of the Deptt. of Science and Technology and is in its final phase.

Q: How common is post traumatic stress disorder in Kashmir? Has it affected the children and adolescent alike?

A. Estimates of the prevalence of posttraumatic stress disorders in the general population of almost all the countries other than the U.S.A are lacking. In my humble way, I have already been working on it for the last two years and, InshaAllah, I will be able to give you the exact details after further work of few months more. However, in the analysis of the data pertaining to more than 36000 cases that attended the hospital O.P.D during the year 2003, it was 2.38%. This is clearly an under-representation of PTSD cases, as such cases quite common in the community. Due to lack of awareness, people continue with the agonizing symptoms of the disorder, considering it as a natural reaction or response to the catastrophic stress and abnormal situation, i.e. considering it as a continued process of natural bereavement following death of close relative or other losses. This is a very disturbing trend because such prolonged illness without speedy psychological intervention leads to chronicity, which may then be difficult to get treated even in the most advanced centers of the world.

One of our studies was based on the characteristics of 167 treatment seeking cases of PTSD and presented in New Orleans, Louisiana USA (December-2001) in the annual conference of International Society for Traumatic Stress Studies. It revealed that the patients in this sample were mostly illiterate, from a lower socio-economic status and more than half were married. The illness tended to be severe and chronic with a mean duration of 40 months.

PTSD is quite common among children and adolescent also. Our study 'Posttraumatic stress disorder among adolescent in disturbed Kashmir' presented in the international congress of child and adolescent psychiatry in October 2003 was based on 37 cases of PTSD between ages of 12-17 years taken from an orphanage in Kashmir. More than 77% of the sample had witnessed violent death of a close relative or a known person. Majority if the cases had acute onset but were running a chronic course. There is a great need to recognize the condition early and effective intervention needs to be evolved, taking into account developmental and cultural prospects as well as characteristics of our society.

Q: Since your studies have been widely quoted in different contexts, what have been your main objectives?

A. The universal objective of research has to be the well being of humanity and to gain new knowledge. To assess the need and plan any intervention including the development of services, you have to seek scientific data, as otherwise you have to depend on wild guesses and that is always fraught with failures and erroneous results.

The results of such scientific studies can not only have important theoretical implications of the cause and cross-cultural nature, but can be of immense help to construct a client profile so as to tailor and develop the services both by the Govt. as well as by N.G.Os in an optimal way such that the services and facilities remain strictly relevant to the needs of population. The result of such scientific exercises becomes the guideline for future endeavors. This is all the more important in a field like mental health, which has always strong sociocultural determinants. Moreover the gratifying sense of fulfillment after hard labor and sleepless nights for a mere write-up of few pages may not be expressible in words. But, it is the result of such exercises only that I have been single-handedly able to preserve for the progeny, the complete profile of various psychiatric ailments treated in Kashmir over the past quarter of a century. Had not the meticulously maintained case records been analyzed, every person associated with mental health or behavioral sciences would have been left high and dry after the devastating fire in 1996. Future germinates in the soil of present, but has its roots in the past.

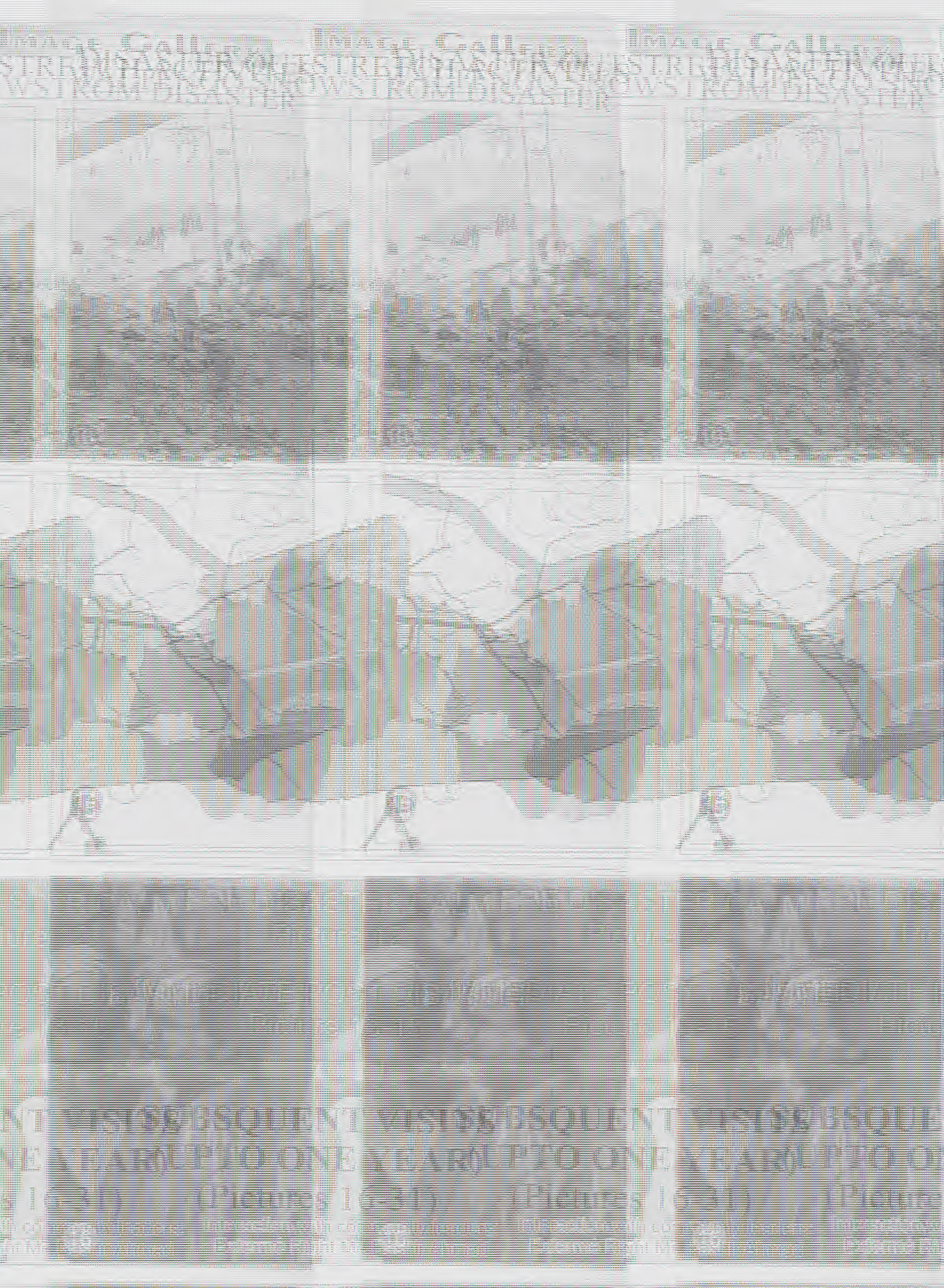
Q: In the Year 2000 you proceeded on a long leave and subsequently submitted resignation. What was the reason?

A. Each one of us is on a mission, irrespective of what social or occupational identity mask we are putting up. This is what differentiates us from the other living beings. Satisfying the basic-instincts should never be the only objective of human life, rather to discover our true higher self is also imperative. Some professions can facilitate this process and I believe that my profession, where you get ample opportunities to wipe the tears of suffering fellow human beings falls in such category. But at the same time, one has to have a complete insight, and any willful negligence towards this mission can be a source of perpetual loss. When the hospital got gutted in 1996, everything fell in shambles resulting in complete chaos. There was no suitable space for satisfactorily treating hundreds of emotionally disturbed patients daily on outdoor basis. Academic activities also got hampered. The situation continued to worsen over the coming years. With hundreds of outpatients from young children to frail, busy struggling from morning till evening to reach a single 7 ft x 9 ft. room (cell), where all the doctors would work. Often patients would receive physical injuries in the commotion. On the other hand no postgraduate students were selected in the medical college for a couple of years in Psychiatry. After repeated persuasions of about five years, I was convinced that it was no use to burn oneself out like this. No worthwhile help to the community or contribution to the profession was tantamount to forfeiting the aim of life. So I had decided to quit.

Q: With so much to do, so much to deal with, how do you feel at the end of the day?

A. Satisfied, and as I said before, working as a psychiatrist has to be a mission. One is dealing with 'psyche' i.e. soul rather than 'soma' -the body only. Suffering masses identify with you as nearest and dearest one. At no point of time can you become immune to their traumas and sufferings. You share their sufferings and traumas and relieve their souls. One is always close to humanity in this field. Alleviating the sufferings of others means great satisfaction for one's own self.







19



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23



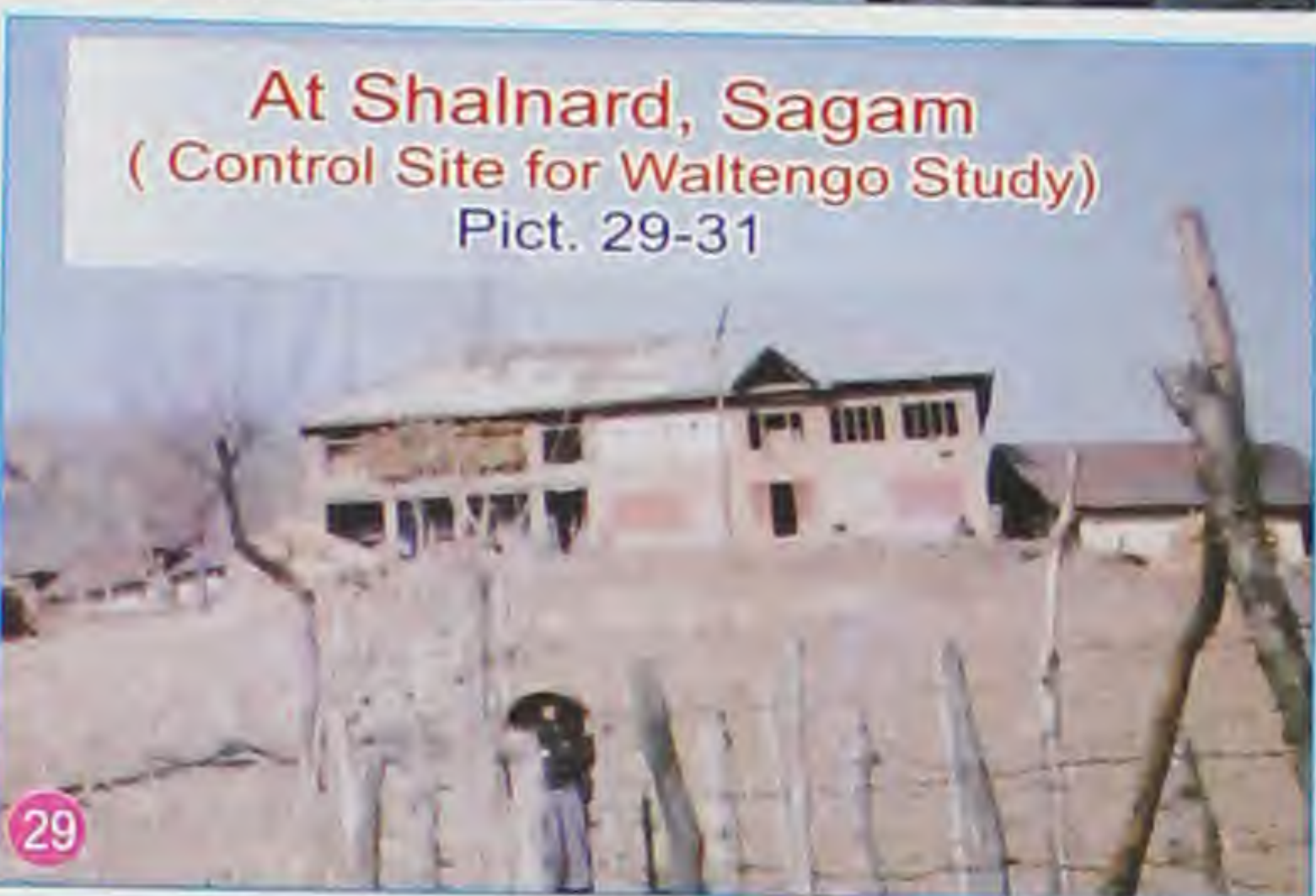
24



25 Interacting with Community Leader, Mr. Bashir Ahmad



26



At Shalnard, Sagam
(Control Site for Waltengo Study)
Pict. 29-31

Earthquake Oct. 2005
Pict. 32-35



31

32

At Uri



33

34

At Tanghdar

35

CHILDREN AFFECTED BY DISASTERS

Pict. 36-40



36



37



38



39



40

COMMUNITY SERVICES / AWARENESS ACTIVITIES Pict. 41-49

Defeat Depression Programme (1998-2003) Pict. 41-42



Religious Scholars involved Pict. 43-44



At Banihal : Pict. 45-46



II Organized PG Development Programme (May 13-15, 2005)



Dr. Mushtaq A Margoob



Dr. R.C. Jiloha

Dr. P. Kulhara



Dr. M.S. Bhatia



Dr. P.K. Dalal



Dr. Neena Bohra



Dr. T.B. Singh



Dr. R. Nagpal

Dr. C. Andrade



Dr. Harish Shetty



Dr. Ajit Avasthi



Dr. J K Trivedi



Dr. V.N. Vahia



Dr. E. Mohan Das



Dr. S.C. Bhargava



Dr. Kuldeep Sharma



Dr. Parmjeet Singh



Dr. Vikas M. Sharma



Dr. Nimesh G. Desai



Dr. Shiv Gautam

At Bijbehara : Mass Trauma Survivors of Oct. 93



48

(Hazratbal Shrine Crisis - More than 50 deaths following a shootout at Bijbehara) Pict. 48-49



49

YEAR 2005 AT A GLANCE

I 5th Annual National Conference of Indian Psychiatric Society (ANCIPS) 2005 (Jan-Feb), Chandigarh

57th Annual Conference of
Indian Psychiatric Society
29th January - 1st February 2005 - CHANDIGARH



Chairing the special
symposium of IPS on
disasters.



39

International audience

Convener PTSD
Programme



40



Dr. Tasneem Shaukat, Stage Secretary



Panel Discussion: From Left to Right :- Dr. Reshma Aggarwal, Dr. Alok Sarin, Dr. B.S. Chawan, Dr. Ranjeev



Post Graduate Scholars Participating in the Programme

III Indian Association of Private Psychiatry's (IAPP) National Seminar on Disaster and Mental Health: Lecture Theme-Psychopharmacological Interventions: Immediate Post Disaster Phase, Hyderabad.

IV Indian Institute of Public Administration (IMPA) Seminar on ' Impact of Turmoil on Quality of Life in Jammu and Kashmir(May,2005), Srinagar.



- V Organized Physician-Psychiatrist Meet on Psychological Aspects of Disaster (June, 2005), Srinagar: Lecture Theme- An Overview of Disaster Trauma Consequences and Remedies.
- VI Providing Expert Advice to NGO: Conducted an Outreach Programme for the Doctors at Dhobiwan (With MSF)



- VII Chaired Indian Psychiatric Association (IPS) Award Committee, Ludhiana
- VIII Marking Mental Health Week; Debate on 'Mental Health as we Understand it.' (Oct., 2005, Government Medical College Srinagar)



With Khursheed A Ganai (IAS)
Div. Commissioner, Srinagar





XIII

58th ANCIPS, 2006:

Presentation, as the Lead Author, in Collaboration With Researchers from NIMHANS, Bangalore (Dr. C.Andrade) and Harvard Medical School, VA,Boston Health Care System (Dr. Zafar Ali), on "Efficacy of ECT. In Chronic Treatment- Refractory PTSD: First Study of its Kind in the World Literature.



XIV

'A Study of p53 Gene Alteration in Esophageal Carcinoma and Its Correlation to Common Dietary Risk Factors in Kashmiri Population'- Paper Contributed by Imtiyaz Murtza (PhD), Dhuha Mushtaq (MSc Biotech), Mushtaq A. Margoob (MD Psych), Amit Dutt (PhD), Nisar A. Wani (MS Gen. Surgery), Ishfaq Ahmad (Mphil, Genomics), Mohan Lal Bhat (MD, Patho), accepted for publication in the forthcoming issue of World Journal of Gastroenterology.

XV

Along with the Head of Department of Psychiatry, All India Institute of Medical Sciences (Prof. Rajat Ray), Conducted The Delhi University's MD Examination of Year 2005, as the External Examiner of The Candidates of Maulana Azad Medical College and Lady Hardinge Medical College, Delhi.

Over the past 1½ decade of turbulence in Kashmir, every year a number of activities related to different facets of intervention in traumatic stress and its associated issues have been going on. A passing reference to a few of such activities may not be out of context here.

Defeat Depression Programme (1998 - 2003)

Excerpts from the concluding programme of the series

To live in a community of total 6 million people, having more than a million depressed patients (Margoob et al, 2002) and more than a lakh of them thinking in terms of ending their lives is a matter of great concern rather a big challenge for any medical professional, working in Kashmir. The situation has become all the more grim due to very high percentage of chronic post traumatic stress disorder presenting with comorbid moderate to severe depressive illness (Zafar, Magoob et al 2000).

Correct diagnosis and effective management of depressive disorders is emerging as a dilemma all over the world. World Health Organization (WHO) has ranked depression as the 4th among the list of the most urgent health problems worldwide and has predicted it to become number two in terms of disease burden by 2020 overriding diabetes, cancer, arthritis etc. Among women, depressive disorder is going to be the number one disease in this regard. I guess this has already started happening here in Kashmir.

Since human beings react to external and internal events by initiating a series of thoughts, feelings and actions, distinguishing the normal emotion of depression that is virtually experienced by everyone at times in their lives, is difficult from a depressive illness that requires medical treatment and is often problematic for the clinicians not trained in mental health sciences. The widespread misconception among common people that psychiatric disorder like depression is not a disease but a deficiency of will, that can be overcome with effort is, based on misinformation and lack of knowledge. This misconception can extend into primary care settings where patients present with unexplained physical symptoms to express emotional distress. Many depressed patients with somatic complaints may be overlooked as ones having no real illness, once medical illnesses are evaluated and ruled out. Even in the most advanced countries like the US and UK more than 50% of the depressed individual are neither diagnosed nor treated by their family doctors. The adequate recognition and treatment of depression is hampered by negative public attitude and gaps in professional expertise. This is the reason that the Royal College of Psychiatrists in collaboration with Royal College of General Physicians had to embark upon its most ambitious public/professional education campaign in its 30 year old history - the 'Defeat Depression Campaign from 1992-1996'. This campaign was designed to improve professional recognition and treatment of depression and to increase public understanding of the features, extent, course and treatment of depression. Since most primary physicians in USA also do not receive much training in recognizing depression, which is why the National Institute of Mental Health had to launch its Depression Awareness Recognition and Treatment (DART) Programme to help doctors intervene more confidently and more successfully. The recognition and management of depressive disorders in developing countries including India, is still worse partly because till now no such significant mass campaign has been initiated. At places like Kashmir where there has been a phenomenal increase in the psychiatric morbidity in general and depressive disorders in particular (Margoob et al 2002) professional complacency would simply amount to allowing this disease explode into an unchecked epidemic. The need to intervene was getting further substantiated by the data emerging from more than half a dozen scientific studies from various clinical settings including from psychiatric clinical experts (Margoob et al 1999) as well as from the medical trainees (Margoob et al 2003). All these factors provided enough justification to do something worthwhile for evolving appropriate, preventive, curative and rehabilitative strategies and to make a start in this direction, at least. With a total of ten psychiatrists, almost all of them awfully busy and clustered at one or two places in the city of Srinagar only, such a gigantic task of imparting education for correct diagnosis and effective management of depressive disorders is simply impossible. With all these constraints in mind a very humble beginning was made by the undersigned in the year 1998 by trying to identify the main areas to be focused upon which emerged as 1) Non Psychiatric experts and primary physicians 2) Postgraduate trainees 3) Media.

However expectations from such a programme, which started almost as a one-man affair in the beginning, had obviously to be very modest, but the overwhelming response and cooperation by the professionals and public was really very heartening. Equally gratifying was the excellent performance of the postgraduate trainees. A passing reference to some of the main activities include: Continuing consultation liaison psychiatric interaction with non psychiatric colleagues working in tertiary care settings, with an additional regular feature of a yearly extensive lecture by the undersigned on different aspects of depression, followed by question answer session, which on many occasions extended beyond the stipulated period because of overwhelming enthusiasm and interest of non psychiatric colleagues from different clinical settings including tertiary care institutions of Government Medical College Srinagar, Sher-i-Kashmir Institute of Medical Sciences (SKIMS) and its college at Bemina and specialists from the primary care. Some of the lectures like, 'Diagnosis and Management of Depression in

Appendix I

General Practice', were published by the host pharmaceutical concern and distributed among the audience. The demand for such writeups was so high that the copies had to be xeroxed in hundreds to cater the demands of a beeline of practitioners from field and teaching institutes. Since in my last lecture (Oct. 14, 2002) addressed to the large gathering of experts from different medical and surgical domains some of the questions had remained unanswered due to shortage of time, I had promised the concerned to reply their queries in a write up at some proper occasions. The present effort is a fulfillment of that promise and I have selected this occasion of the World Health week for it. I hope, that this humble attempt would add to efforts of helping this suffering community. One more equally important area of activity to combat depression, was developing professional skills and expertise, in trainees of the only postgraduate department of psychiatry in the state of Jammu and Kashmir. The meritorious students who joined the department over the past few years have not only been associated with the routine clinical and teaching activities but were also involved in research and academic activities organized by various prestigious national institutes from time to time. This core group of new budding psychiatrists, if given chance and opportunity to work in the future, can be of immense help in carrying forward such missions with the zeal and zest, they have already shown.

Focus on media has also been an important aspect of the Defeat Depression Programme over the years. Besides many interviews, a series of weekly or biweekly programmes on various aspects of depression, as psychoeducation for masses was run by both TV and radio. The print media also carried out write ups from time to time on the topic. Presently more than 60 TV programmes on awareness campaign and psychoeducation programme stand recorded on psychiatric disorders, as a part of a six episode series, currently being telecasted. Similar radio programmes are also in the pipeline. Recently pharmaceutical industry has also joined public awareness and similar activities besides continuing medical education (CME) in a big way. I hope Defeat Depression activities would be continued and carried forward by others from now onwards, because as per previous plan my 5-year programme is ending now. It is to be followed by an equally important rather more disturbing, relatively less researched, and often more disabling and agonizing disorders related to post traumatic stress. If Defeat Depression programme has served some useful function in enhancing public awareness and improving professional recognition and management of depression, the credit for that will go to all the organizations and individuals who participated, cooperated and helped me from time to time. Obviously the blame for any shortcomings will fall on me, but one satisfaction which still will make me repeat such activities in future also is

*MAIN AKELA HI CHALA THA JANE BE MANZIL MAGAR
(ALONE, I HAD BEGAN MARCHING TOWARDS GOAL.)
LOG AATAY GAYE AOUR KARWANN BANTA GAYA
(PEOPLE KEPT ON JOINING AND THE CARAVAN INCREASED)*

Dr. Mushtaq A. Margoob

Dear Editor**Appendix - II
Letter to the Editor**

We have read with interest the review article on the effects of environment on endocrine system (Journal Med. Sciences. Vol. 3, No. 2, p. 83-85). While the authors have attractively highlighted the better established interaction between environment and endocrine functioning in conditions like diabetes, thyroid dysfunction, reproductive system disorders and growth abnormalities but we feel that stress as one of the most important environmental factors in such interaction deserved a detailed discussion especially in view of the recent findings that even the regulation of immune systems can be learned and conditioned by understanding the interaction between behavior, neuroendocrines and CNS which is reciprocated and vice versa¹. Even seasonal variations in hormonal levels like thyroxine, as pointed out in the review, may be of no recognizably clinical importance at present but some indirect evidence does exist that in some presently unknown way such a phenomenon could have a critical significance in the disease etiology and its management. Seasonal depressive disorder which is so prevalent in Kashmir valley during late winter and early spring², with light therapy as the established treatment of choice for this order, may not be linked to the hormone, like melatonin alone but a possible etiological link of seasonal variations in thyroxine level with the disorder would be worth investigating at a place like ours where seasons are well demarcated and seasonal mood disorders are rampant. The dramatic treatment response shown by some of the antidepressants resistant depressive disorder patients (with normal thyroid function profile) to exogenously induced change in thyroxine concentrations by administering thyroxine as an adjunct with the already tried anti-depressants may serve as one more possible pointer to such kind of a relationship. The role of stress that is known to inhibit thyroid releasing and stimulating hormones and increasing prolactin level³ may also have etiological significance in periodic hypothyroid state, recurrent depressive disorder and cyclical hyperprolactinemia as the recent studies have started pointing out⁴.

Since mind and body are inseparable one, therefore, even a remembered stress, which is only a wisp of thought, releases the same flood of deleterious hormones as the stress itself leading to incapacitating conditions like post-traumatic stress disorder which can follow a single catastrophic stressful event and the recurring thoughts with associated mental symptoms alone, can result in structural neuropathology including damage to hippocampal neurons and lasting behavioral change⁵. Studies have begun to examine the validity of the endocrine responses as a marker in conditions like post stroke depression. A recent study of growth hormone response to an antidepressant (desimipramine) found that growth hormone responses were significantly blunted in patients with post stroke depression suggesting adrenergic receptor function may be an important marker for post stroke depression⁶.

Another related reference to the subject would have been the effects of mental stress (norepinephrine acting on lipase activities) producing alterations in serum lipids with increased post prandial triacylglycerol rich lipoprotein fractions-as one of the possible mechanisms contributing to higher rise of ischemic heart diseases in stressed people⁷. Equally academically stimulating and benefitting our local fraternity would have been a reference to the possible interaction of stressful working conditions including modernization and its associated stressful life styles, having a link with urban domicile of diabetes over rural ones as reported by the authors themselves in their pioneering work on the prevalence of type 2 diabetes mellitus in Kashmir Valley⁸.

Mushtaq A. Margoob et al
Department of Psychiatry

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Although the result of our research carried out so far could get published in prestigious journals outside, but the local scientific periodicals even when some of them were yet to be indexed, were preferred to increase academic interaction and make our observations readily available to the local fraternity.

Editor

Correspondence 1

Prof. N.N. Wig is a leading figure in international Psychiatry. He founded the department of psychiatry at the premier Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, in 1963. He headed the department of Psychiatry at the other premier institute, All India Institute of Medical Sciences (AIIMS), from 1980-83. From 1984-90, he served as the World Health Organization's Regional Advisor Mental Health at Alexandria Egypt. He was responsible for developing mental health programs in 22 countries, from Pakistan to Morocco in the Middle East and North Africa. He is the only Psychiatrist from India to be honored with the highest award of the Honorary Fellowship by the Royal College of Psychiatrists. For the last 10 years, he is on the steering committee of World Psychiatric Association's International program to reduce stigma and discrimination due to mental illness. In October 2000, on his 70th birthday, a book 'Mental Health in India 1950-2000' was published in his honor, to which many leading national and international mental health experts contributed. In September 2004, the famous Fountain House, Psychiatric centre at Lahore, Pakistan, named a newly constructed building as 'Prof N.N. Wig unit', in recognition to his services to the development of mental health in the countries of South Asia.

Editor

Dr. Narendra N. Wig
MD DPM (Eng.) DPM (Scot.)
FAMS, FRC Psych
Professor Emeritus Psychiatry, PGIMER, Chandigarh
12 Dec 2002

Appendix - III

Dear Dr. Mushtaq Ahmed Margoob:

I am delighted to read in The Tribune (Sunday 8th Dec) reference to yours and Dr Zaid's very good work on PTSD Cases during present conflict in Kashmir. Please accept my congratulations and best wishes for your further success.

PTSD is a very important area for psychiatric research work and there is very good opportunity in the present-day Kashmir. Considerable literature is now available. You may even ask WHO and other international agencies for more information and help. A comparison with that happened in Bosnia or Afghanistan etc. would be interesting. You can also compare it with Indian data on disasters like riots in various parts, earthquakes in Maharashtra and Gujarat etc. Prof. R.S. Murthy in Bangalore may have good references. It is important to collect a good series of hospital cases and if possible to do a community survey. Good documentation would be very important.

Anyway, I am sure you must be already doing all this. This letter is just an appreciation and to convey my good wishes to you and Dr. Zaid.

With kind regards and best wishes for a happy New Year 2003.

Sincerely

(N.N. Wig)

Dr. Mushtaq Ahmed Margoob M.D.
Consultant Psychiatrist
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Srinagar 190001
Jammu & Kashmir

Correspondence 2

IEC-SKIMS

The importance and repute of any medical educational institution can be gauged from its evidence based activities resulting from continued quest and research.

Unfortunately, in our setup, research has hardly ever been considered important and seldom sees light at a collective or institutional level. Probably, this has been one of the factors that pose a hindrance to our institutions becoming prestigious tertiary care centres.

In the absence of an institutional watchdog system to ensure credible clinical and research work, whenever any researcher has to quote his institution, the absence of an ethical committee leads to a great humiliation. In the state's oldest and widely known medical educational institution, i.e., Government Medical College, Srinagar, has never had an institutional ethical committee lasting for more than a few months. Two years back also, on the initiative taken by the undersigned (editor), an institutional ethical committee was framed by the then principal/dean. However, after a short period it was relegated to cold storage, mainly due to disinterest of all concerned.

The biggest medical research institute of Jammu and Kashmir, SKIMS, fares no better. Though an institutional ethical committee was constituted two years back but the undersigned, as one of its members, is aware of only the inaugural meeting

(Editor)



Dr. S. JALAL

M.D. (Med.) D.M. (Card.)

Prof. & Head, Deptt. of Cardiology
DIRECTOR, SKIMS
EX-OFFICIO SECRETARY TO GOVT.

Dr. Mushtaq A. Margoob,
Professor of Psychiatry,
Government Medical College,
Srinagar,

Dear Sir,

As we all are aware, with continuing inquisitions into the unknown, man has been exploring the guarded secrets of nature and is rapidly breaking out of the boundaries of ordinary comprehension for the betterment of his species. Central to the outcome of this curious experimentation and observation is an ever expanding sea of knowledge and development on many frontiers. In this race for research and advancement, biomedical scientists have shown no less of thirst, capability or achievement.

Yet with the expansion of our knowledge, the unknown is paradoxically expanding and something somewhere incredible is always waiting to be known. In our quest to do good, there always remains a possibility that we might inadvertently do harm and negate the promises of research to humankind. Therefore, while not imposing unnecessary impediments in the growth and proliferation of the blessings of science, it is imperative that we regulate our scientific curiosities by a strict balance of risks involved and the benefits expected. Such a regulation assumes even further importance when the research involves human beings as subject matter so that human values are respected and preserved. Indeed the need for uniform ethical guidelines for research on human subjects is universally accepted, welcomed, and actually endorsed. The ushering-in of the arena of biotechnology including genetic engineering, assisted reproduction, and organ transplantation together with the increasing realization of the need for evidence based medical practice and improvements in the right consciousness among the people, has actually put a sense of urgency on the ethical scientists.

In this context, the development of an Institutional Ethics Committee to regulate the research conducted by our biomedical scientists in accordance with the universally accepted fundamental ethical principles of patient autonomy, beneficence, non-maleficence and justice has been a long-felt unmet need in our part of the world. You will be glad to learn that taking a lead from the international scenario in general and from the Indian Council of Medical Research in particular, we at Sher-I-Kashmir Institute of Medical Sciences, Srinagar have decided to develop one such committee in our Institute on an urgent basis. The establishment of an ethics committee is extremely important to protect our public from exploitation while not depriving them of the benefits of rational research and experimentation. However, the job needs phenomenal sincerity of purpose, rationality of action, and above all, an unfailing sense of responsibility and love for humanity. Evidently, it can only be entrusted to the few who are gifted with the ability to blend their honest devotion, knowledge, and experience with transparent reasonability and a Herculean will.

In this regard, I am pleased to inform that your good self has been considered suitable to be included in the Institutional Ethics Committee, Sher-I-Kashmir Institute of Medical Sciences (IEC SKIMS). I feel great pride to invite you to the position of Clinical Expert in the committee. I have firm faith that your presence will help IEC-SKIMS achieve excellent reputation and deliver its responsibilities in all its future endeavors. I hope that you will accept the invitation and play another illuminating role so characteristic of your enlightened personality.

With kindest regards,



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Srinagar 10-06-2004

Correspondence 3

In building the lives of the survivors of various disasters, psychosocial interventions have an important role to play. Achieving such objectives is only possible if the interventions are strictly tailored in accordance with the ground realities and as per the needs of the population, who are supposed to benefit from it, throughout various phases and stages of post disaster period

Editor

S.K. Agnihotri
Secretary



**NATIONAL FOUNDATION FOR
COMMUNAL HARMONY**

(An autonomous organization under the
Ministry of Home Affairs, Government of India)

D.O. No. 3/7/05-NFCH

Dated the 8th July, 2005

Dear Dr Margoob,

I have seen a news item entitled 'State of Trauma' by Shri Toufiq Rashid at pages 14-15 of the Sunday edition of the Indian Express, dated the 26th June 2005 published from New Delhi. The article gives a detailed account of pain, of trauma, of violence and of loss being suffered by the population of the Kashmir valley. It specifically quotes examples of symptoms of Post-Traumatic Stress Disorder (PTSD) and makes a reference to studies being conducted by Dr. Akash Yusuf Khan under your guidance.

2. This Foundation has been working with such children throughout the country since its inception in the year 1992. Over 3000 such children are being assisted in the Kashmir valley itself. The details of schemes being implemented by the Foundation have been given in the enclosed brochure for your information.

3. To help these children and their families, the Foundation has prepared a manual for the use of community level workers to provide psycho-social care to the survivors of violence. I am sending herewith a copy of the same for your valuable comments and suggestions so that the manual could be made more useful and adaptable to the conditions in the Kashmir valley. You could also indicate the level of community workers who can undertake this work in the rural areas.

4. I shall be grateful for your early comments in the matter.

With regards,

Yours sincerely,

S.K. Agnihotri
(S.K. Agnihotri)

Dr. Mushtaq Margoob
Professor and Head
Psychiatric Unit
Psychiatric Diseases Hospital
Srinagar (J&K)

Tel: 24633968, 24602859, 24643052, Telegram: SADBHAVANA, E-mail: nfch_inb@nic.in, Website: www.nfch.nic.in,
9th Floor, 'C' Wing, Lok Nayak Bhawan, Khan Market, New Delhi-110003

Correspondence 4

The traumatic stress work carried out in Kashmir continues to elicit a wide interest and appreciation. (Editor)

Date: Wed, 12 Apr 2006

Dear Dr. Margoob,

In your letter to Afzal you are approaching a very serious issue that is prevalent in many cultures. Suggestibility is present in many cultures no matter what form it chooses for its expression the effect of healing in the East, the placebo effect in the West. If we consider that 30% of depressives get well with placebo we can see the magnitude of the problem.

Mental Health promotion in the community is, I believe, the only way to deal with the problem you are highlighting. These programmes may include the well-meaning healers, as well as other key persons in the community, teachers, priests, policemen, army officers etc. We have some experience in Athens on these issues and the results have been very beneficial. Congratulations for your initiative to raise this important point.

Warm regards

Prof. George Christodoulou
Secretary for Sections, World Psychiatric
Association: President, Hellenic Psychiatric Association

Wed, 8 March, 2006

Dear Profs. Deva and Russell

A very interesting article (Pir, Faqir and Psychotherapist: Their role in psychosocial intervention of trauma) by a dear friend, Mushtaq Margoob from Srinagar, Kashmir. I have asked him to keep the dates for Feb 2007 meeting in his diary.

Afzal Javed

Secretary of WPA Section On Developing Countries & Mental Health

Dear Mushtaq

Very timely written paper (Editorial). May I request you to kindly keep this title for your presentation in our Lahore meeting in Feb, 2007. I have already sent you the first information letter about this.

Afzal Javed

Sunday, 19 March, 2006

Dear Mushtaq

Very impressive work (One-year longitudinal study of snowstorm disaster survivors in Kashmir). Please keep this up. All my humble support is for you.

Yours

Afzal Javed

28 March, 2006

Dear Margoob

This is very important and very relevant to our culture (Pir, Faqir and Psychotherapist: Their role in psychosocial intervention of trauma). Religion has always played an important role in helping mentally ill and I suggest we can replicate some study both at Pakistani Kashmir and your part. You will be pleased to know that our first centre at Muzaffarabad will start from 1st April and we can use all our data in this regard. If agreed, let us do a joint survey/ project. I will appreciate your thought on this issue. Profs. Mufti and Haroon will be more than pleased to be associated. I am also sending you a paper of mine about Religion and Psychiatry.

Afzal Javed

Tuesday, 23 August, 2005

Dear Dr. Margoob

I am more than grateful for the time you have taken to reply to my request and shall of course look forward to reading the October edition of JK Practitioner (Trauma supplement).

I should also like to send you some articles by Derek Summerfield, although you may know his work already.

His wonderful qualitative studies and articles are lucid and controversial and more importantly based on huge experience in field work all over the world. He warns against over western style medicalisation and labeling of trauma and favors building on integrated psychosocial support in situ.

May I take this opportunity to extend my full support on the ongoing work in your field into which you put so much energy and commitment.

With best wishes

Dr. Patrica Walsh
The International Centre for Child Health
The Institute of Child Health
30 Guilford Street- UK

Sunday, 09 April, 2006

Dear Dr. Margoob

Thank you for the very interesting and important paper (Editorial), reminding us in this context of the importance of cultural sensitivity and the need to consider spiritual aspects of health. I am sure this will assist the development of work now as well as in future.
With best wishes

Helen Herrman

Secretary for Publications, World Psychiatric Association
The University of Melbourne (AIHI), Australia

Tuesday, 7 March, 2006

Dear Dr. Margoob

Enjoyed reading your editorial, my personal experience with victims of psychotrauma in Karachi, over the last two decades, my data collaborates your views.

Recently our Institute of Psychotrauma Pakistan (ISTP), has been following up victims of earthquake in NWFP and AJK. We are mainly following women and children and experiences are similar to yours.

Kind regard

Unaiza Niaz

CO-CHAIR, Section on Women's
Mental Health, WPA
Director, The Psychiatric Clinic and
Stress Research Centre, and
Director, Pakistan Institute of Psycho-Trauma

Monday 20 March, 2006

Dear Prof. Juan Mezzich

The protocol prepared for World Psychiatric Association Taskforce on Kashmir Earthquake by Dr. Mushtaq Margoob, Prof. Department of Psychiatry, Postgraduate Department of Psychiatry, Government Medical College, Srinagar with inputs from Dr. Srikala Bharat (National Institute of Mental Health and Allied Neurosciences- Bangalore) in my opinion is complete and if the group gives a green signal then it can be implemented. Awaiting an early response.

With regard

J.K. Trivedi

Dept of Psychiatry
King George Medical University Lucknow, India
Zonal Representative for Southern Asia-Zone XVI of WPA
Past President, Indian Psychiatric Society (2004)

Mon, 20 March, 2006

Dear Professor Mushtaq Margoob

I am grateful to you for your contribution. I will read (One-year longitudinal study of snowstorm disaster survivors in Kashmir) very carefully and will incorporate it in my report to the World Psychiatric Association, executive committee.

Warmest regards and many thanks for your continuous efforts.

Yours sincerely

George Christodoulou

Monday, 20 March, 2006

Dear Dr. Margoob

Thank you again for sharing the paper (One-year longitudinal study of snowstorm disaster survivors in Kashmir) with us. Your observations are very appropriate. Incidentally, since you have now feedback from all the experts what is the next step? Even the budget you had outlined.
Have you started the project with the WPA funding? Kindly let me know.

With best wishes

Dr. Srikala Bharat

Addl. Professor Psychiatry NIMHANS

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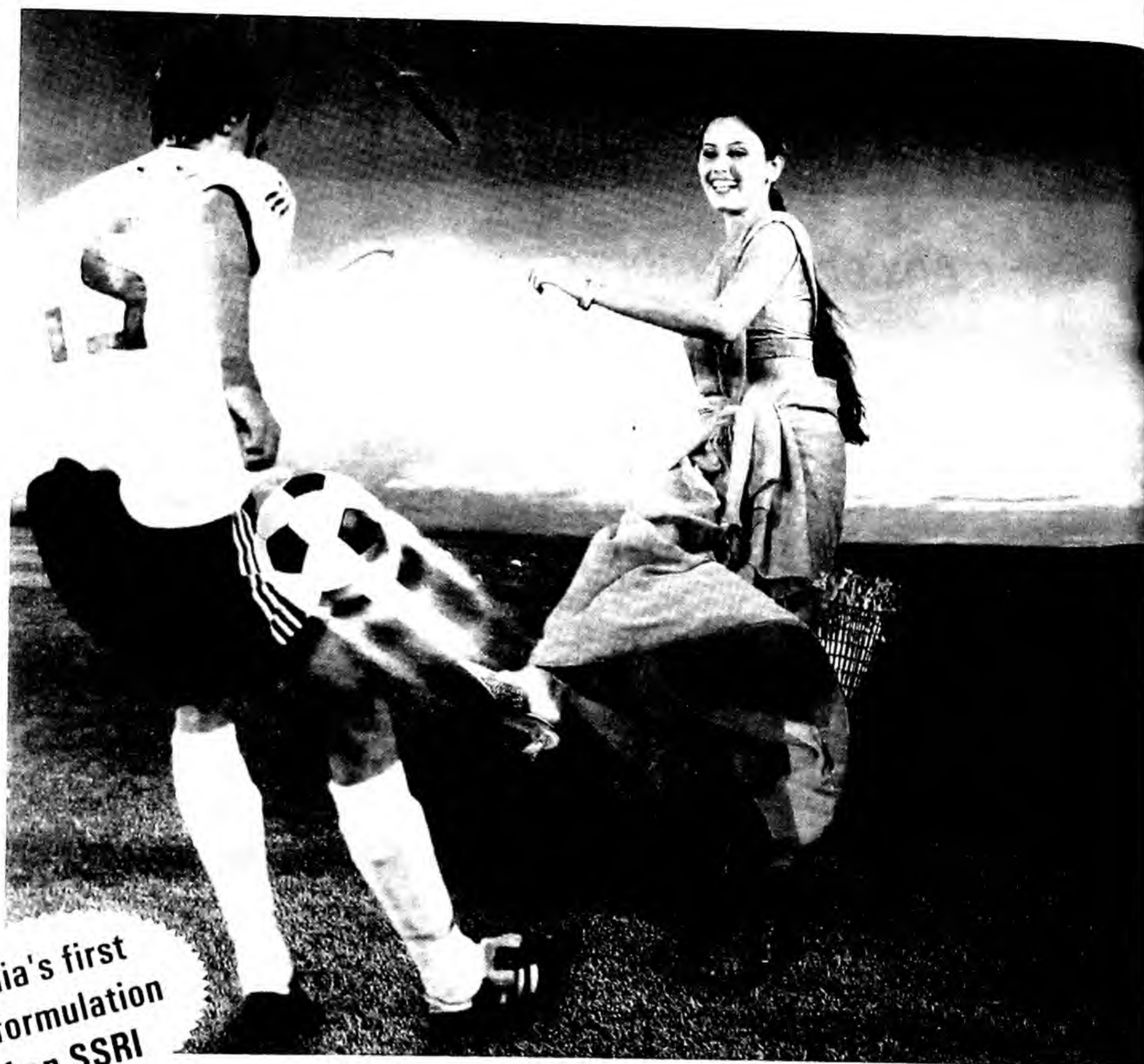
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INDIAN PSYCHIATRIC SOCIETY
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CME PROGRAMME 2006

SKICC Srinagar

Dear member,

Greetings

Kindly find enclosed here with the finalized MID TERM CME Programme of IPS (NZ). We once again request you for your participation along with your Post graduate students.

With regards , Organizing Chairman..... **Dr. Mushtaq A Margoob**

Registration: 9.00 AM to 10.00 AM

Inauguration: 9.30 AM to 10.30 AM

Tea: 10.30AM to 11.00 AM

Session I: Time: 11.00AM to 12.00 Noon

ADHD and Conduct Disorders

Chairpersons: Prof. Ajit Avasthi and Prof. R.C Jiloha

Time: 11.00AM to 11.30 AM

Topic: Clinical features and diagnosis

Speaker: Prof. Manju Mehta, Professor of clinical Psychology, AIIMS.

Time: 11.30AM to 12.00 Noon

Topic: Management

Speaker: Prof. Madhu Nijhawan, Govt. medical College Kota.

Session II: Time: 12.00 Noon to 1.00 PM

Alcohol and Drug abuse among children and adolescents

Chairpersons: Prof. N G Desia and Prof. Kuldeep Sharma

Time: 12.00 Noon to 12.30 PM

Topic: Pattern, Prevalence and Risk factors in Indian Settings.

Speaker: Prof. Rajat Ray, Head Psychiatry Department, AIIMS.

Time: 12.30 PM to 1.00PM

Topic: Management and Prevention.

Speaker: Dr. Amit Sen, Child Psychiatrist, Sitaram Bharatiya institute Delhi.

LUNCH: 1.00 PM to 2.00 PM

Session III: Time: 2.00 PM to 3.00 PM

Disorders of Psychological Development

Chairpersons: Prof. Paramjeet Singh and Prof. R.K Solanki

Time: 2.00 PM to 2.30PM

Topic: Specific Learning Disorders: Diagnosis and Management.

Speaker: Prof. Savita Malhotra, Department of Psychiatry, PGIMER Chandhigarh.

Time: 2.30 PM to 3.00PM

Topic: Pervasive Developmental Disorders.

Speaker: Dr. Jitendra Nagpal, Child Psychiatrist, VIMHANS Delhi.

3.00 PM to 3.30 PM: Valedictory Function.

3.30 PM Onwards Tea

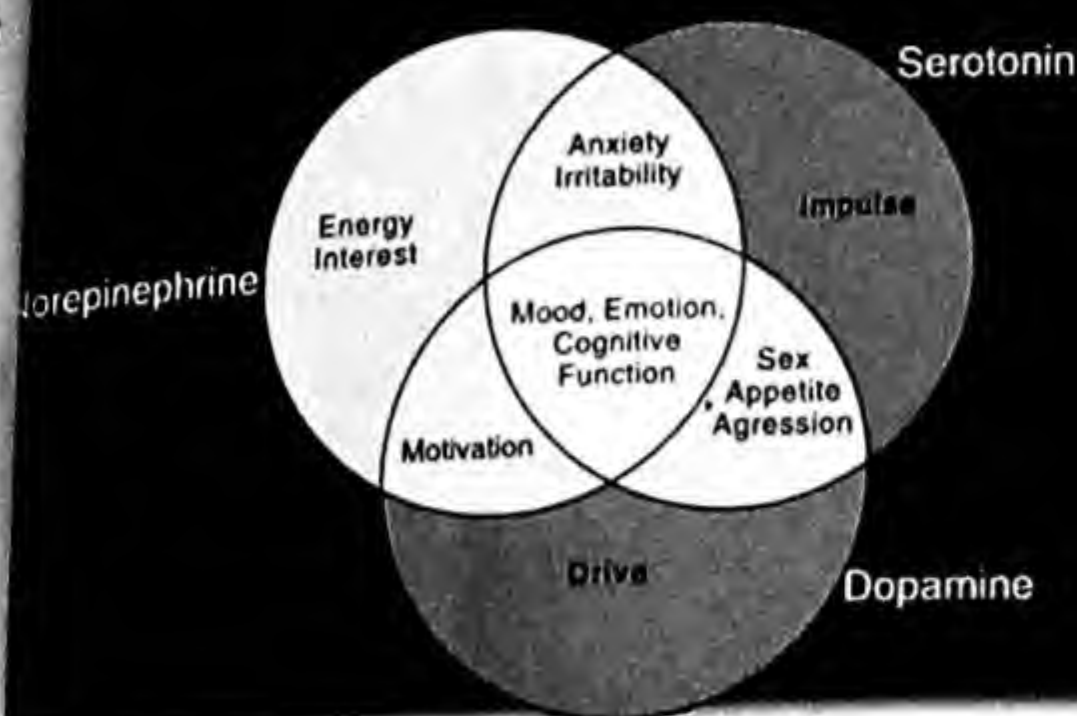
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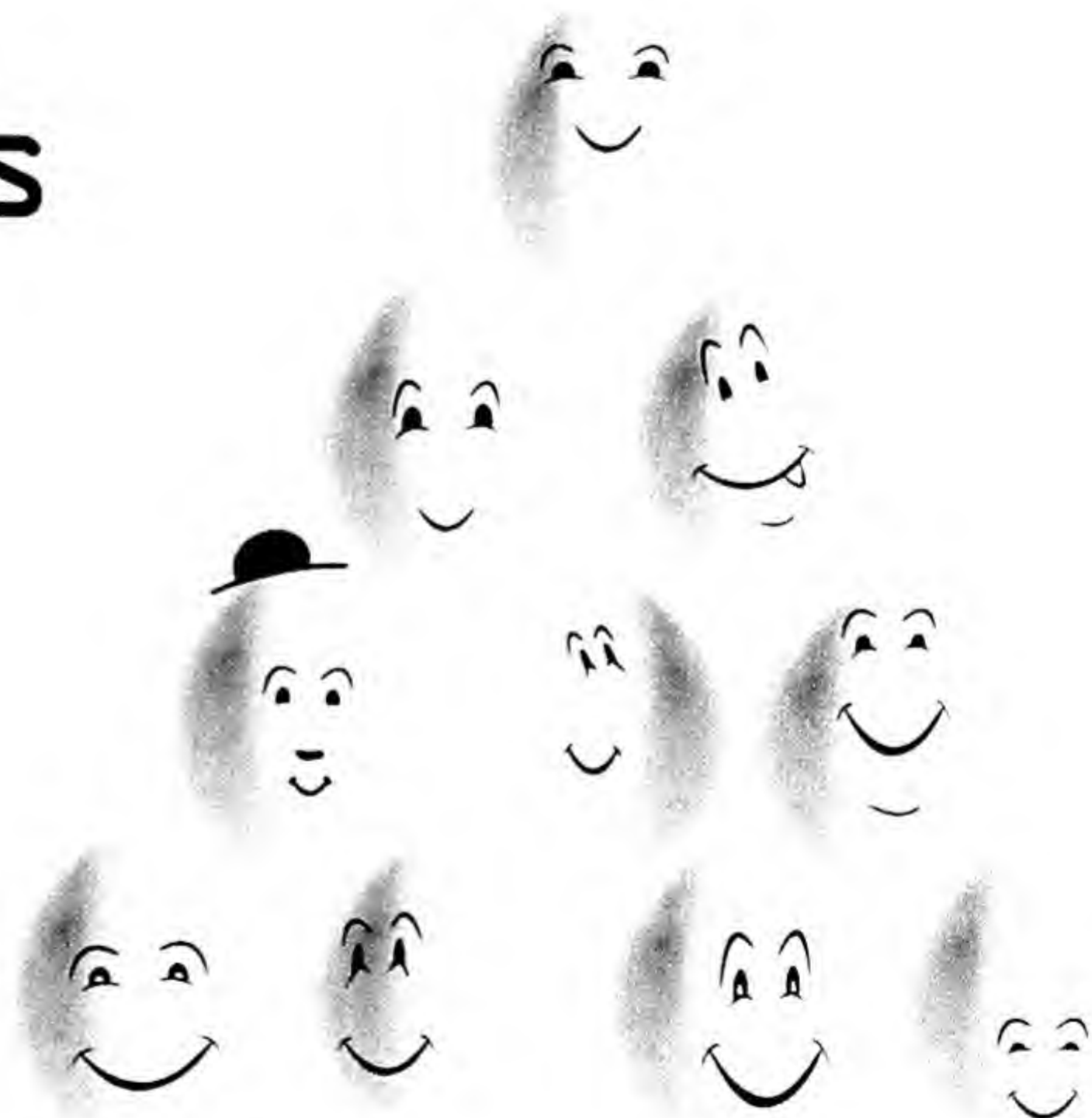
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Wide scale disasters, both natural and manmade have occurred more frequently during the recent past. Disaster research has an invaluable role in identifying outcome following major trauma. Although a wealth of scientific literature, particularly from the developed world is available (through the International Society of Traumatic Stress Studies, and National Centre for PTSD, USA), but scanty information from the developing world (particularly S.Asia) is available so far.

Over the past 15 years, Kashmir has unfortunately got converted into a vast 'trauma laboratory' due to the persistent conflict. The situation has been further compounded by natural disasters (snowstorm and earthquake). All this has changed the face of trauma, response to it, risk and resilience factors and rehabilitation dynamics. During the preparation of the World Psychiatric Association's (WPA's) intervention protocol for Oct 2005, South Asia earthquake, sharing our experiences with the eminent leaders of the world professional body (with 130 National Psychiatric Societies representing more than 1,80,000 Psychiatrists) served a significant stimulus for expediting the compilation of our experiences, of past two decades, with trauma.

The encouraging views expressed by the worthy office bearers of the WPA, who themselves have significantly contributed to the publication of a wealth of scientific literature, included:

Professor Juan E. Mezzich, president of the WPA, who is also the chief editor of journal 'World Psychiatry' wrote on 8th March 2006 *"Dear colleagues and friends, I appreciate the academic strength and caring concern displayed in these discussions between Profs Christodoulou and Margoob and other experts in the area to respond effectively to the disasters we face. It reveals the importance of articulating science and humanism in the fulfillment of our responsibilities. Cordially yours, Juan E. Mezzich"* [Professor of Psychiatry and Director International Centre for Mental Health, Mount Sinai School of Medicine, New York, USA].

Prof. George Christodoulou, chair of the WPA's Institutional programme on Disasters and Mental Health, wrote on 8th March, 2006 *"Dear Dr. Mushtaq Margoob. I wish to thank you very much for your comments concerning my small contribution to the remarkable work that you and your colleagues are admirably carrying out. I am glad that we are in agreement concerning the universality of PTSD. The title of the article you were kind enough to let me have is fully in keeping with our opinion. There may be cases in which a fully blown PTSD does not appear, but elements of PTSD are there and deserve attention and treatment. Thanking you again for your comments, with warm regards, George Christodoulou"* [Chair, European Division, Royal College of Psychiatrists; President Hellenic Psychiatric Association; President International College of Psychosomatic Medicine, Athens, Greece]

Prof. Helen Herrman, Secretary for publications, World Psychiatric Association, wrote on 19 March, 2006 *"Dear Dr. Margoob, Thank you for sending this interesting and relevant editorial. As our colleagues, I am very grateful to you for your articulate expression of this important topic. I am sure it will help to improve understanding across groups that are important in directing responses to mental health needs in emergencies. I look forward to meeting you soon. With best wishes, Helen Herrman"* [Director of Academic Programs, Australian International Health Institute; Director WHO Collaborating Centre for Research and Training in Mental Health; Professor in Public Health and Psychiatry, The University of Melbourne, Australia].

Prof. J.K.Trivedi, Zonal Representative for South Asia of Zone XVI of WPA wrote on 10 March, 2006 *"Dear Prof. Mushtaq Margoob. Responding little late, so kindly excuse me. There will be few in South Asia who can match you in their work with regard to effects of disaster and its management. You have worked for so long and in so much of depth and the same is reflected in your editorial as well as the wealth of data you have generated over the years. With regards, J.K.Trivedi"* [Ex president (2004) and Editor 'Indian Journal of Psychiatry' (1997-2002), of The Indian Psychiatric Society. Professor of Psychiatry, King George Medical University, Lucknow, India].